UD-28

SERVICE UPDATE
SECOND HALF—2005

KitchenAid®

Home Appliances

Prepared by: WHIRLPOOL CONSUMER CARE

PART NO. 8178535

FORWARD

The following service update information is provided to make you more knowledgeable about Whirlpool, Roper, and KitchenAid major appliances.

Service update information is designed for the experienced service specialist. It keeps you advised of the most recent improvements and product changes, and allows you to service these products more efficiently.

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TABLE OF CONTENTS

COOKING ..... Page 1
Product Introductions ..... Page 1
Dual Fuel Range With Steam Assist ..... Page 1
Percent Of Steam Output For Selected Cooking Modes ..... Page 2
Relay Logic Chart ..... Page 4
Steam System Components ..... Page 4
Steam Board & Appliance Manager ..... Page 5
User Interface ..... Page 6
Boiler Thermal Cutout ..... Page 6
Tank & Water Level Sensor ..... Page 7
Steam System Diagram ..... Page 8
Boiler Thermistor ..... Page 8
Water Inlet Valve & Drain Pump ..... Page 9
Drain Port ..... Page 9
Descale Condition ..... Page 10
Service (Test) Procedure ..... Page 10
Steam System Failure/Error Codes ..... Page 11
Boil Dry Test ..... Page 12
Steam Vent ..... Page 13
Door Drip Pan ..... Page 13
Cavity Thermal Fuse ..... Page 14
New Feet/Rollers ..... Page 14
Wiring Diagram ..... Page 15
Whirlpool 2005 Gas & Electric Cooktop Line ..... Page 16
Added Features ..... Page 16
Bridge Element ..... Page 16
Product Updates ..... Page 17
KitchenAid Electric Freestanding & Slide-In Ranges ..... Page 17
Microwave Hood Combinations (MHC) ..... Page 17
Gas Regulators Leaking ..... Page 18

DISHWASHERS ..... Page 19
Product Updates ..... Page 19
KitchenAid KUD_02 Dishwasher ..... Page 19
Tall Tub Dishwashers ..... Page 25
Clean LED Blinks Seven Times ..... Page 25

LAUNDRY ..... Page 26
Product Introduction ..... Page 26
Pedestal ..... Page 26
Product Updates ..... Page 27
Direct Drive Washer ..... Page 27
Direct Drive Coupler ..... Page 27
Duet Washer ..... Page 27
Tachometer-Less Motor ..... Page 27
Odors In Duet HE3 & HE4 Washers ..... Page 28
27″ Gas Dryers ..... Page 29
20,000 B.T.U. Burner ..... Page 29

COMMERCIAL LAUNDRY ..... Page 30
Product Updates ..... Page 30
High Efficiency Top Load Commercial Washer ..... Page 30
Commercial Laundry Labor Warranty ..... Page 31

REFRIGERATION ..... Page 32
Product Updates ..... Page 32
New KABI Bottom-Mount Ice Maker Shutoff Arm ..... Page 32
New Top-Mount Evaporator Fan Motor Bracket ..... Page 32
Refrigerator Wiring Harness Change ..... Page 33
50# Ice Maker Redesign ..... Page 34
Old Style 50# Ice Maker ..... Page 35
Model ACU108PP & ACU124PP Air Conditioners ..... Page 36
Condenser Fan “Hits” ..... Page 36
Lowe’s Extended A/C Warranty ..... Page 38
New Dehumidifier Design ..... Page 40

SERVICE POINTER INDEX ..... Page 41

COOKING

PRODUCT INTRODUCTIONS

Dual Fuel Range With Steam Assist

MODELS: KDRP707RSS & KDRP767RSS

This system is a KitchenAid Pro Line (Classic Commercial) oven with a steam assist cooking feature. The oven control is composed of: an appliance manager board, a user interface board, (custom display board), and a steam board.

The Dual Fuel Range with Steam Assist has the following oven features:

- Convection Cooking With Steam
- Convection Cooking Only
- Conventional Cooking

Convection Cooking With Steam—Whenever the steam assist function is on, the convection fan is on, but not the convection element (see the “Relay Logic Chart” on page 4 for information).

Convection Cooking—This mode has a fan and heating element to provide true convection cooking.

Conventional Cooking—Uses both the bake and broil elements.

30´´ Dual Fuel Range With Steam Assist

36´´ Dual Fuel Range With Steam Assist

PERCENT OF STEAM OUTPUT FOR SELECTED COOKING MODES

The following charts are for each option that the customer can use during the “Auto” or “Select” Steam function. Each cooking mode (meat, fish, etc.) is broken down into five segments. Each chart (segment) shows the pre-determined amount of steam that is released into the oven. Segment one shows that no steam is ever released into the oven during preheat conditions. Note that in all segments, the broil element operates more than the bake element, since broiling is the main source of heat during steam operations. When cooking with steam, the convection element does not operate. Only the convection fan will operate.

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	6	400	0	100	100	0	ON
2	4	450	0	100	100	0	ON
3	8	450	0	94	40	0	ON
4	2	450	100	94	40	0	ON
5		U.I.	50	94	40	0	ON

Table 1: Balances & Times for Meat & Poultry

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	4	185	0	100	100	0	ON
2	2	203	100	100	100	0	ON
3	5	Temp Set	100	100	100	0	ON
4	5	Temp Set	100	94	40	0	ON
5		Temp Set	0	94	40	0	ON

Table 2: Balances & Times for Fish

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	4	212	0	45	100	0	ON
2	6	250	100	35	65	0	ON
3	6	Temp Set	80	35	65	0	ON
4	15	Temp Set	0	35	65	0	OFF
5		Temp Set	0	35	60	0	OFF

Table 3: Balances & Times for Dessert

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	10	Temp Set + 25F	0	100	100	0	ON
2	4	Temp Set + 25F	100	100	100	0	ON
3	Load Food	Temp Set + 25F	30	100	100	0	ON
4	1	Temp Set	50	15	100	0	ON
5		Temp Set	0	5	100	0	ON

Table 4: Balances & Times for Bread

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	4	185	0	100	100	0	ON
2	2	203	100	100	100	0	ON
3	Time +3	Temp Set	100	100	100	0	ON
4	Time +4	Temp Set	100	94	40	0	ON
5		Temp Set	0	94	40	0	ON

Table 5: Balances & Times for “Hi Steam”

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	4	185	0	100	100	0	ON
2	2	203	80	100	100	0	ON
3	Time +3	Temp Set	80	100	100	0	ON
4	Time +4	Temp Set	80	94	40	0	ON
5		Temp Set	0	94	40	0	ON

Table 6: Balances & Times for “Lo Steam”

SEGMENT	Time	Temp	% Steam	%Broil	%Bake	Conv. Element	Conv. Fan
1	4	185	0	100	100	0	ON
2	2	200	100	100	100	0	ON
3		Temp Set	15	94	40	0	ON

Table 7: Balances & Times for “Holding”

RELAY LOGIC CHART

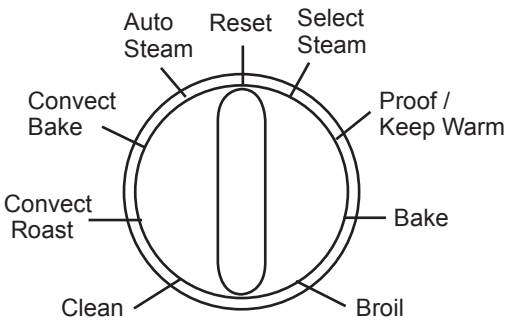
The Relay Logic chart shows which relays are closed during specific cycles. The selection knob is shown with all of the available cooking modes. Note that the convection fan is cycling on and off during the steam functions. Actually, the fan only cycles during the “dessert” mode to prevent any delicate foods from cracking.

MODES / RELAYS	BAKE	BROIL	CONV FAN	CONV ELEM	BLOWER	VALVE	BOILER	LIGHT
RESET	O	O	O	O	⊠	O	O	⊠
AUTO STEAM	+	+	⊠	O	⊠	⊠	⊠	X
CONV. BAKE–PREHEAT	X	+	X	O	⊠	O	O	X
CONV. BAKE	+	O	X	+	⊠	O	O	X
CONV. ROAST	+	+	X	O	⊠	O	O	X
CLEAN	+	+	O	O	⊠	O	O	X
BROIL	O	+	O	O	⊠	O	O	X
BAKE	+	+	O	O	⊠	O	O	X
PROOF	O	+	O	O	⊠	O	O	X
KEEP WARM	⊠	⊠	O	O	⊠	O	O	X
SELECT STEAM	+	+	⊠	O	⊠	⊠	⊠	X

RELAY LOGIC KEY

O – OFF + – CYCLING (MAX. PERIOD = 60 SEC.)

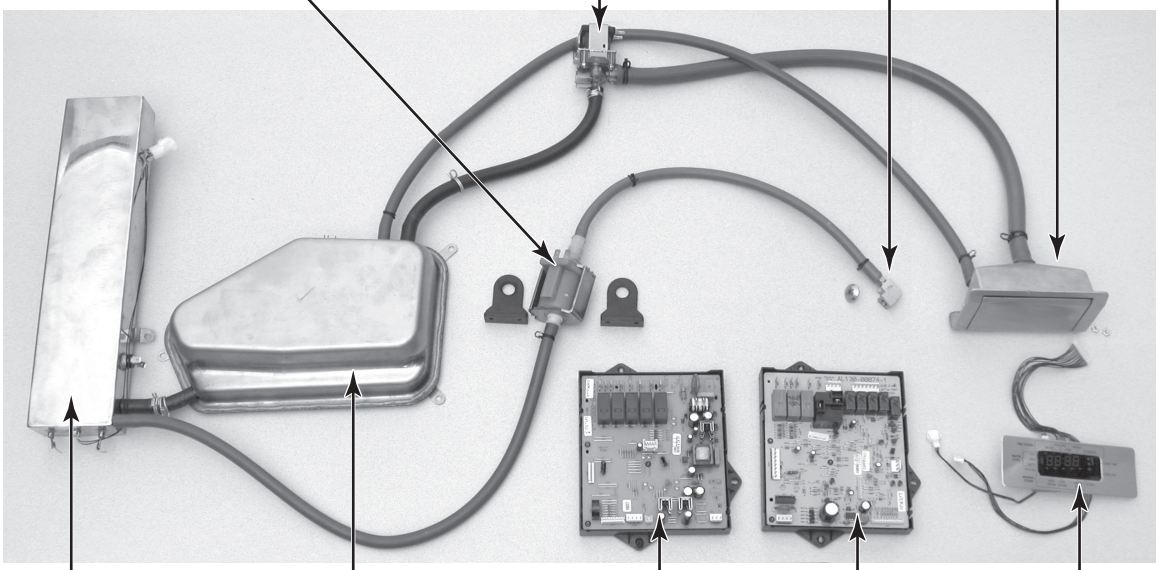
X – ON ⊠ – ON OR OFF



Selector Knob

STEAM SYSTEM COMPONENTS

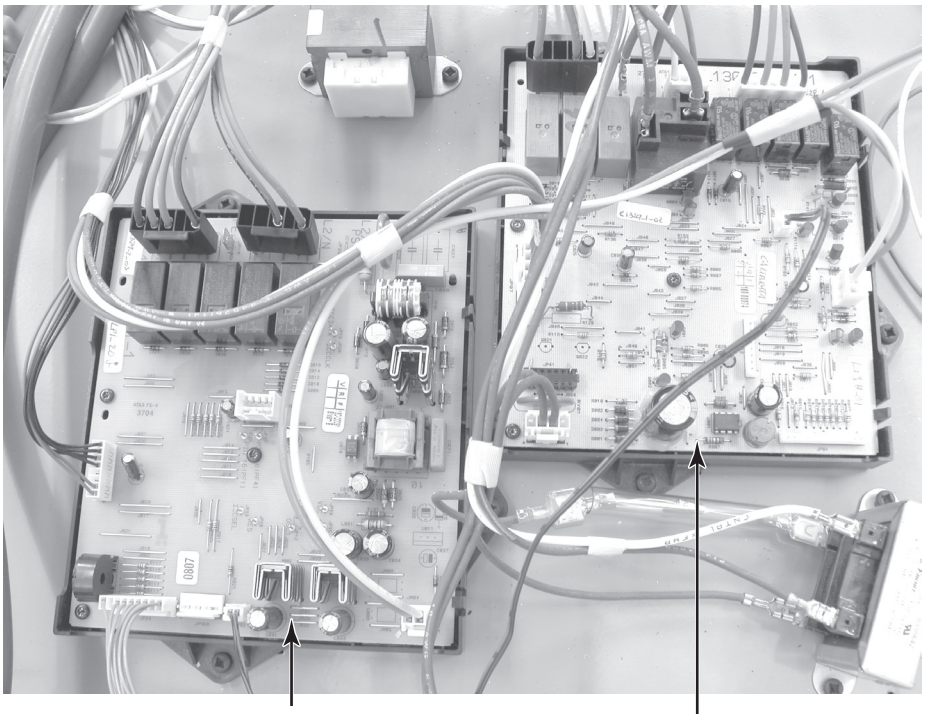
The complete steam operating system with all components is shown below. Different colored tubing is used for each application.

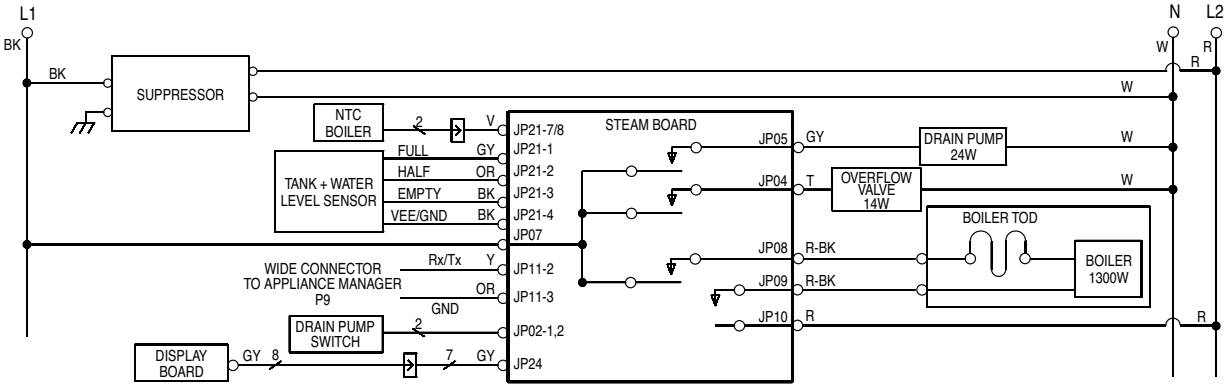


STEAM BOARD & APPLIANCE MANAGER

The steam board monitors the water level in the water tank (full, half, & empty) via the water level sensor. The steam board monitors water temperature via the boiler thermistor, and controls the relay for regulation of the steam production. The board also manages the boiler element, the inlet (overflow) valve, and the drain pump. It monitors the status of the door and drain switch, and communicates with the User Interface (LEDs and buzzer) and the Appliance Manager (see diagram below).

The Appliance Manager reads the cavity temperature from the RTD sensor and control relays for regulating oven cavity temperature (cooking mode and temperature set points). It also provides all UL and CSA required safety functions. The Appliance Manager manages operation of the cavity heating elements, cavity lights, and cavity and cooling fans. It monitors the door and door latch status, cavity temperature, bi-directional communication with the User Interface, and bi-directional external communication with the Steam Board.





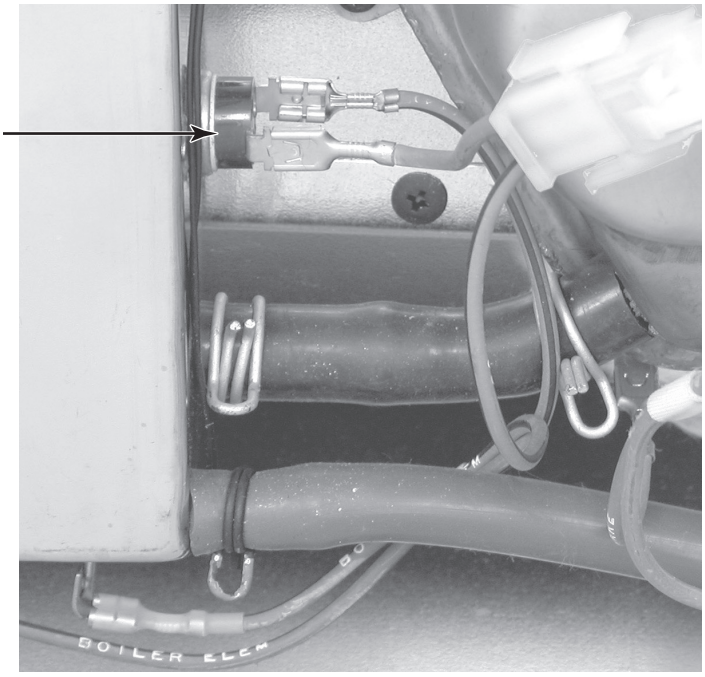
USER INTERFACE

The user interface consists of Selector and Set knobs, the Enter, Cancel, and Drain buttons, and the LED display.

BOILER THERMAL CUTOUT (NC)

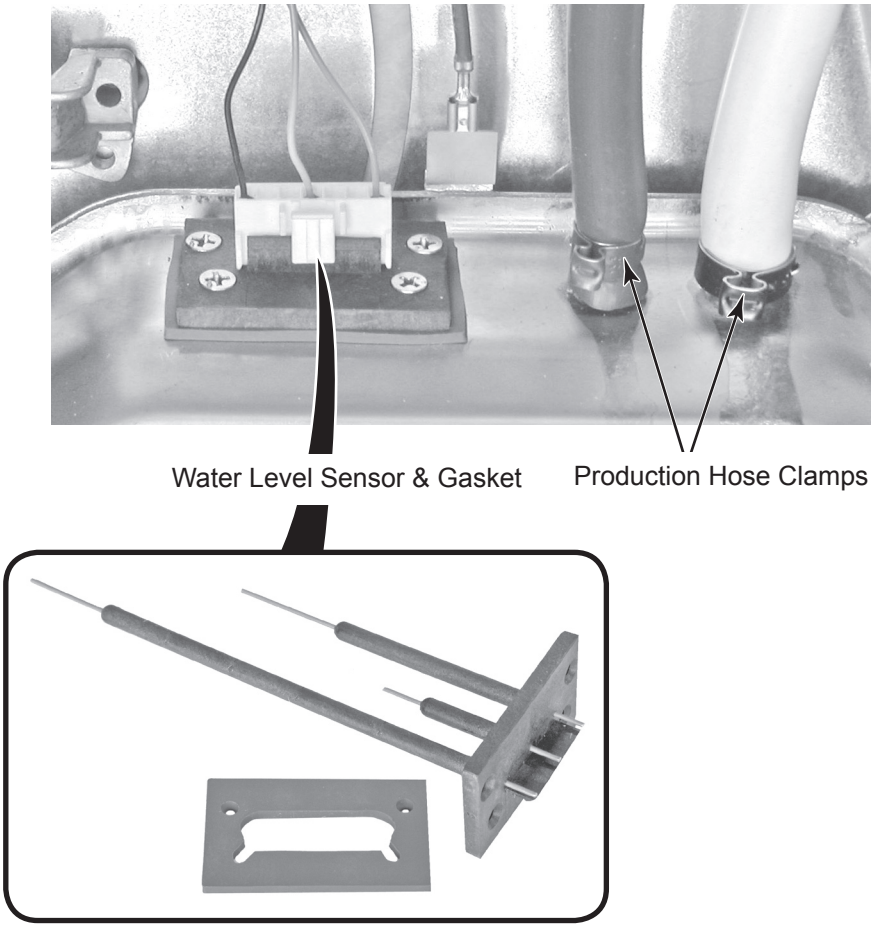
Voltage = 24 VAC, 10 amps. The cutout opens electronically within 1 minute if the temperature exceeds 220°F in the boiler tank.

Thermal Cutout—Shuts Down Boiler Element
- Opens @ 220°F
- Resets @ 200°F



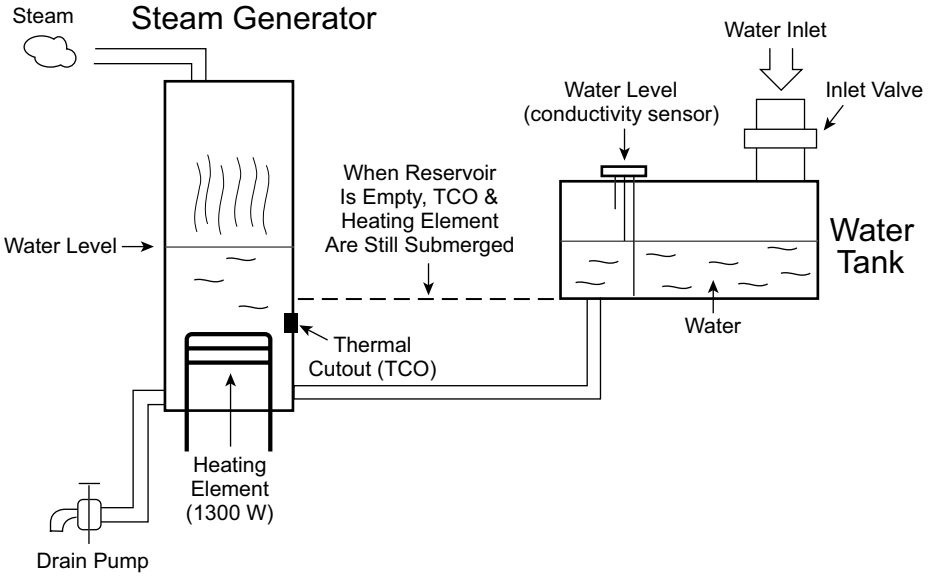
TANK & WATER LEVEL SENSOR

The water level sensor controls the water level in the reservoir tank. When the display indicates the system is full, there will be an audible signal, and then 4-6 seconds later, the inlet pump will close. The system holds approximately eight cups of water.



STEAM SYSTEM DIAGRAM

The heating element is always submerged. As the water level sensor shows the system is empty, there is still sufficient water in the boiler to submerge the heating element, unless the system is drained. So subsequent fillings will not require the full eight cups of water.

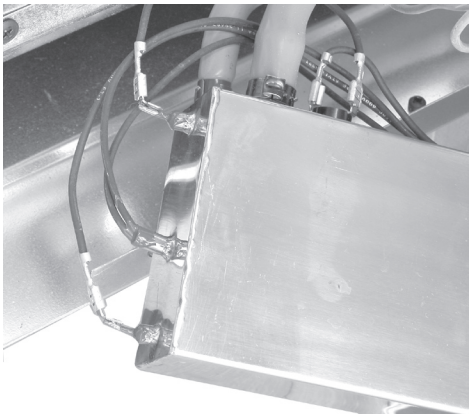


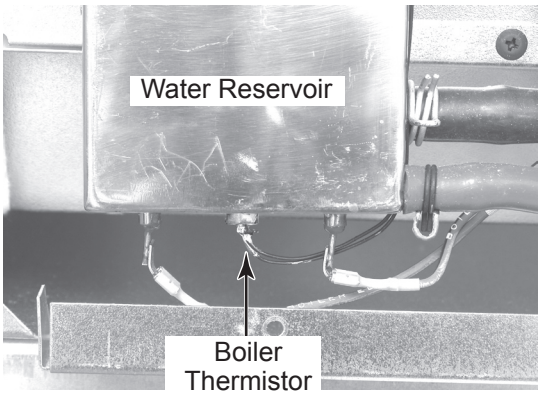
BOILER THERMISTOR

The boiler thermistor:

- Monitors the presence of water in the boiler.
- Monitors the water temperature in the boiler so it does not exceed 240°F (steam is produced at 212°F).
- Communicates with the steam board to close the boiler relay.
- Communicates failure codes if the temperatures exceed limits.
- Prevents the draining of water that is too hot.
- Activates the descale LED if the system needs to be cleaned.

This component is connected directly to the steam board. The fitting is water tight and is not replaceable as an individual component.



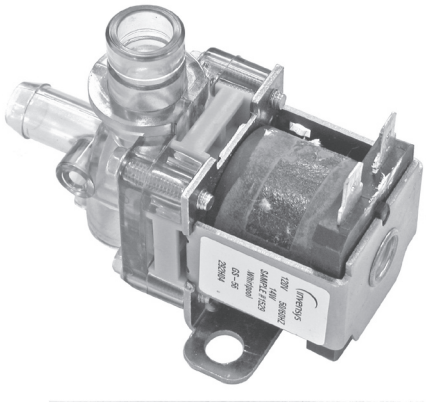


WATER INLET (OVERFLOW) VALVE & DRAIN PUMP

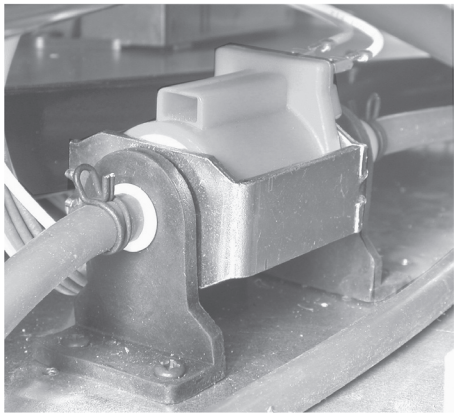
The water inlet valve is normally closed, and controls the filling of the water reservoir. The valve opens when a steam function is selected and the water level in the reservoir is less than full.

The drain pump drains water from the boiler/tank. When the drain button is pressed, the relay on the steam board closes, and the pump drains the water. The drain pump is deactivated as soon as the drain button is released.

Draining is not possible unless the oven is turned off, the water temperature is below 122°F (50°C), and the oven door is open.



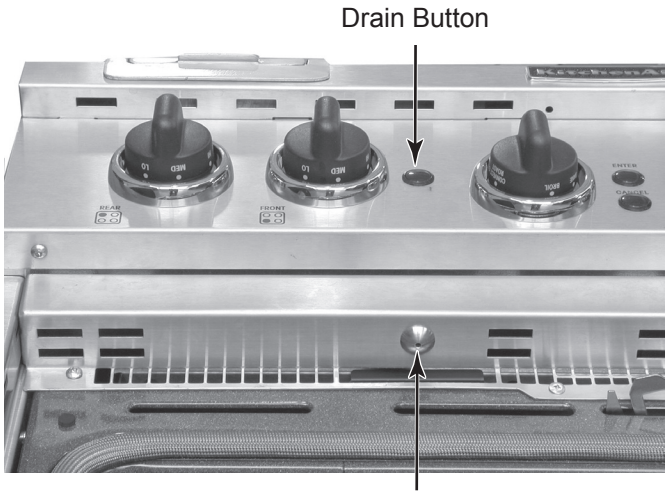
Water Inlet Valve
120 VAC, 14 W



Drain Pump
120 VAC, 24 W

DRAIN PORT

The drain port is mounted below the control panel and under the water fill cup. When draining is required, the door must be open, and a container available to collect the water. When draining the system, the oven must be off, the oven door open, and the water within the boiler cooler than 122°F.



DESCALE CONDITION

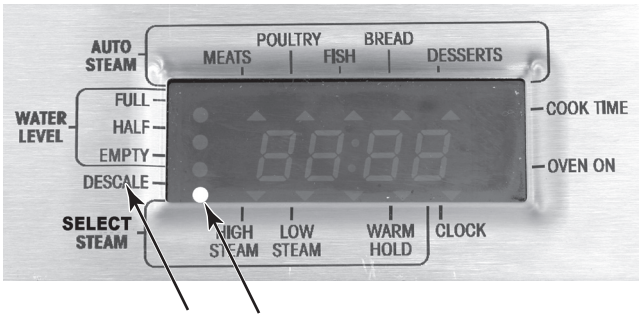
If customers use hard water, it can create lime build-up (scale) on the heating element in the boiler. The amount of scale that settles on the water level sensor is much less, as compared to the scale on the heating element, since the scaling process is greater where temperatures are higher. If a descaling cycle is planned and executed regularly, the heating element and the water level sensor will work correctly.

If soft water is used, the system will rarely need maintenance. If hard water is used, a descaling cycle will need to be performed. The display will indicate when a descale operation is required.

The Descale LED will turn On when:

- The boiler heating element is on continuously for more than 5 minutes.
- The boiler thermister is above 221°F for more than 2 minutes.
- The water level sensor confirms that water is present.

The descaling process will require filling the system with a 50/50 mixture of vinegar and water, allowing it to sit for a few hours, and then draining the system. Rinse the system thoroughly with clean water (see the Use and Care Guide).



Descale With LED Indicator

SERVICE (TEST) PROCEDURE

This test procedure provides an easy check of the components.

To enter the Test function:

1. Unplug range or disconnect power for at least 5 seconds.
2. Place selector knob in the “Reset” position.
3. Plug in range or reconnect power.
4. Press and hold the “Cancel” key, and then press and hold the “Enter” key until the display shows “tESt.”
5. Using the selector knob, it is now possible to test individual components (see Test Table 1 in the Tech Sheet).
6. To exit from the test routine, press and hold the “Cancel” key, and then press and hold the “Enter” key for at least 2 seconds.

NOTE: This test is available in the Tech Sheet.

STEAM SYSTEM FAILURE / ERROR CODES

The following error codes pertain to steam operation only. Other failure codes are available for the main oven operation, and are located in the Tech Sheet.

FAULT CODE	CODE EXPLANATION	RECOMMENDED REPAIR PROCEDURE
F20	Water Temperature out of Range (See “Test Procedure”)	1. Unplug range or disconnect power. 2. Check the sensor connection on the steam board (JP21). 3. Disconnect the boiler sensor and measure the resistance with temperature between 68°F (20°C) & 95°F (35°C). The resistance must be between 130 kΩ and 60 kΩ. 4. If resistance is not valid, replace the boiler sensor. 5. After checking the sensor resistance, run the “Boil Dry Test”. 6. If the problem is not fixed, replace the steam board.
F21	Water Level Sensor Error (Display LED Indicates which sensor probe is not working; See “Water Level Inconsistent Values”)	1. Unplug range or disconnect power. 2. Check the water level sensor connection on the steam board (JP21). 3. Check the water level connector on the water reservoir. 4. Remove the sensor from the reservoir, clean and dry sensor. 5. If the problem is not fixed, replace the steam board.
F23	Boil Over Temperature (See “Test Procedure”)	1. Unplug range or disconnect power. 2. Disconnect the boiler sensor and measure the resistance with temperature between 68°F (20°C) and 95°F (35°C). The resistance must be between 130 kΩ and 60 kΩ. 3. If resistance is not valid, replace the boiler. 4. After checking the sensor resistance, run the “Boil Dry Test”. 5. If the problem is not fixed, replace the steam board.
F24	Drain Button Disconnected	1. Unplug range or disconnect power. 2. Check the connection on the steam board (JP02). 3. If the wires and the connections are good, replace the steam control board. 4. If the problem is not fixed, replace the Drain button.
F25	Broiler Failure (See “Test ”Procedure")	1. Unplug range or disconnect power. 2. Check the connection of the steam board (JP07, JP08, JP09, JP10). 3. Check the power connections on the boiler. 4. Disconnect the boiler temperature sensor and measure the resistance with temperature between 68°F (20°C) and 95°F (35°C), the resistance must be between 130 kΩ and 60 kΩ. 5. If resistance is not valid,replace the boiler sensor and run the, “Boil Dry Test”. 6. Check the boiler TOD placed on the boiler itself using a continuity tester. 7. If the continuity reads infinite (∞), replace the boiler. 8. If the problem is not fixed, check the resistance of the heating element. If the resistance is 0 Ω or, infinite (∞), replace the heating element of the boiler. 9. If the problem is not fixed, replace the steam board.

Additional Failure Notes:

When the system detects a steam failure code, the oven can be used in the traditional mode and the failure is shown only when the selector knob is rotated to “Auto” or “Select Steam.”

The steam failure codes can be manually reset without disconnecting power by rotating the function knob to “Auto” or “Select Steam” and holding the “Cancel” key down for 5 seconds.

The failure code is removed until the failure is detected again.

BOIL DRY TEST

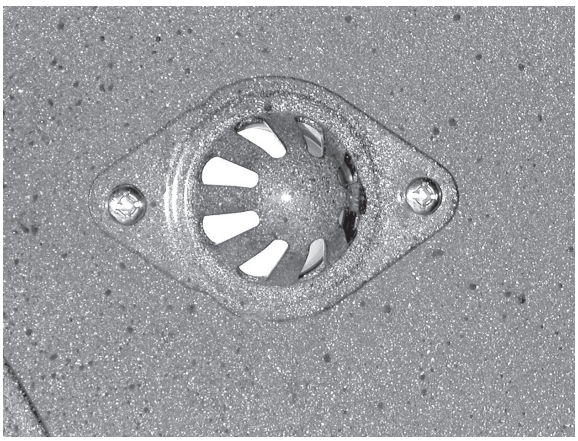
After repairing the F20, F23, or F25 fault, it is always necessary to run a “Boil Dry” test to verify that the water level sensor is working properly, and is not generating the failure. Without this test, there is a high risk for the same failure to occur in a few days.

To perform the test:

1. Drain the reservoir completely. Do not stop the draining operation until no water exits from the drain outlet.
2. Place the oven in the “Service Test.”
3. Turn the function knob to the “Auto Steam” position.
4. If the display is showing “FILL,” the test is successful. Stop testing procedure.
5. If the display is showing “boIL,” and the boiler heater is turned on, stop the test immediately by turning the function knob to the “Reset” position.
6. Replace the water level sensor and repeat the test.

STEAM VENT

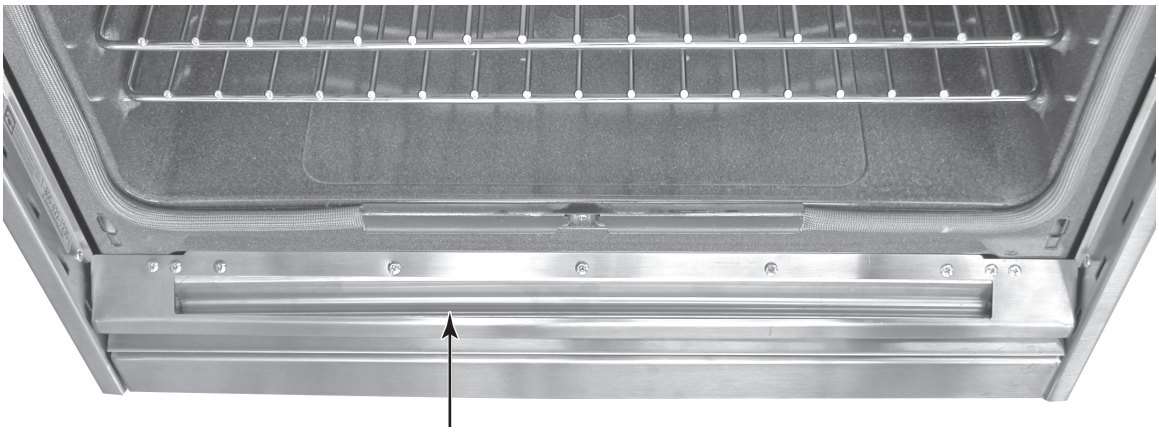
The steam vent is located on the oven cavity at the upper right rear corner.



Steam Vent (Inside Oven Cavity)

DOOR DRIP PAN

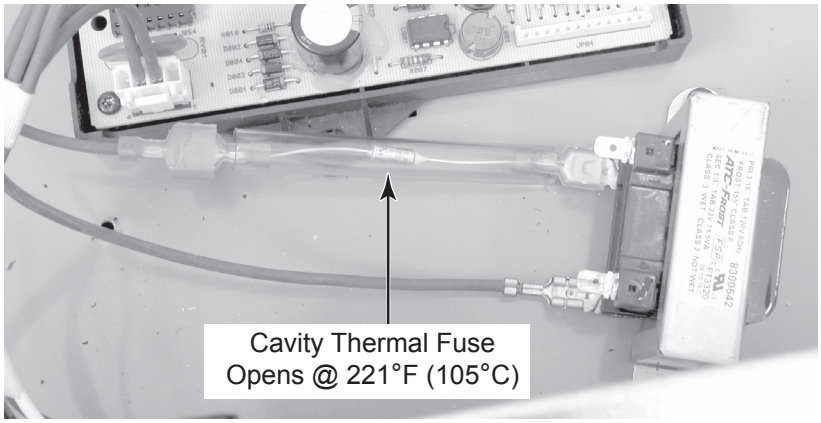
A drip pan is located below the oven door to catch condensation that might accumulate when opening and closing the oven door. This pan may need to be cleaned at times. Information is included in the Use and Care Guide.



Door Drip Pan

CAVITY THERMAL FUSE

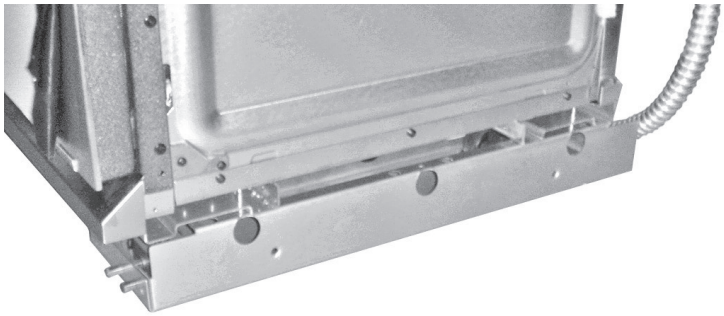
The cavity thermal fuse controls temperatures in the burner box area. It will open at 221°F and will shut down the control transformer. If this fuse opens, it could indicate that the blower fan is not operating properly.

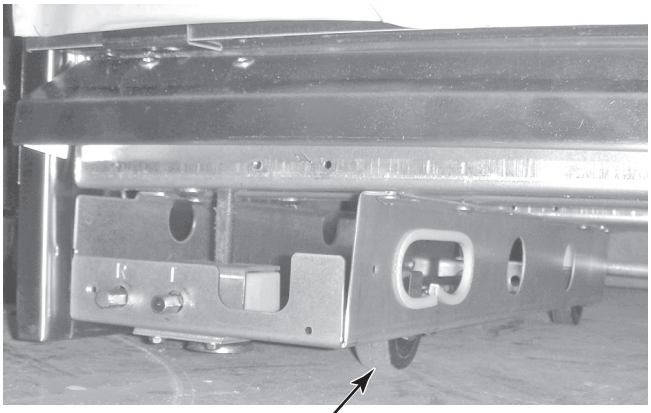


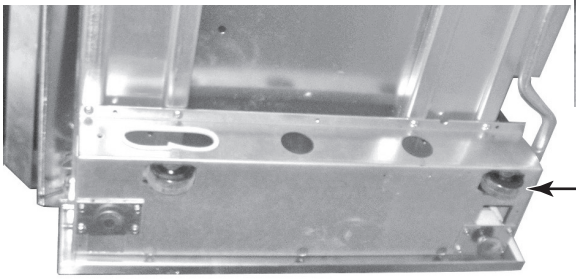
NEW FEET / ROLLERS

The initial production will have the old design feet. The new roller assembly will start into production in December, 2005.

Old Design
(High and Low Positions)

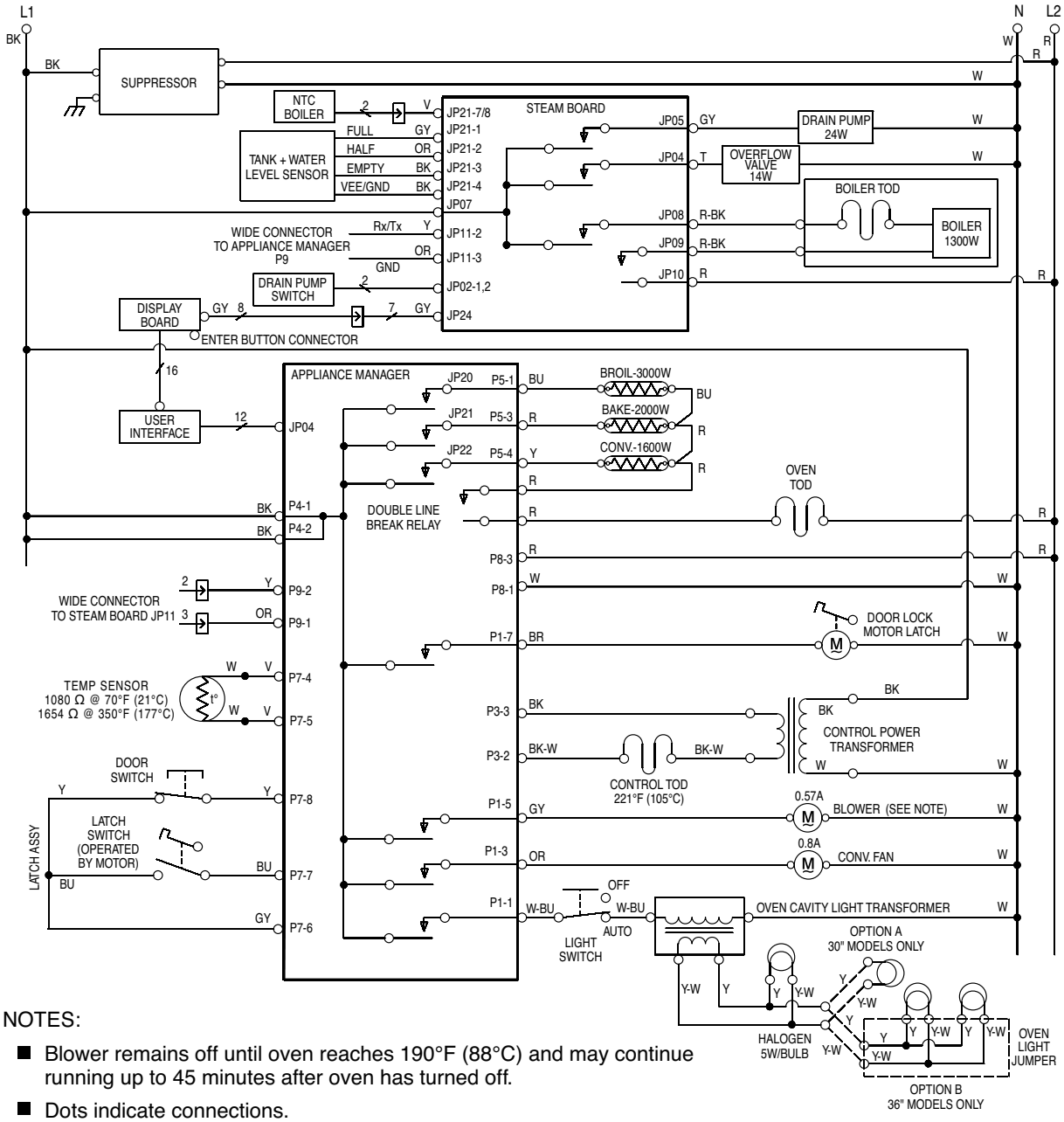






New Roller Assembly

WIRING DIAGRAM



NOTES:

- Blower remains off until oven reaches 190°F (88°C) and may continue running up to 45 minutes after oven has turned off.
- Dots indicate connections.
- Circuit shown in STANDBY/OFF mode with oven door closed.

Whirlpool 2005 Gas & Electric Cooktop Line

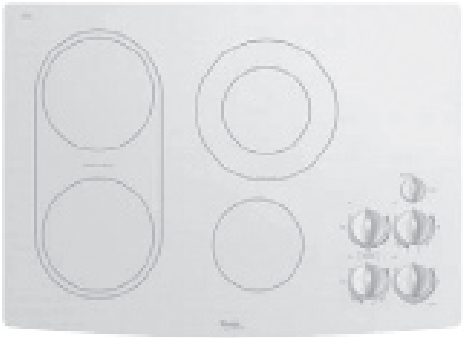
ADDED FEATURES

Electric Cooktop

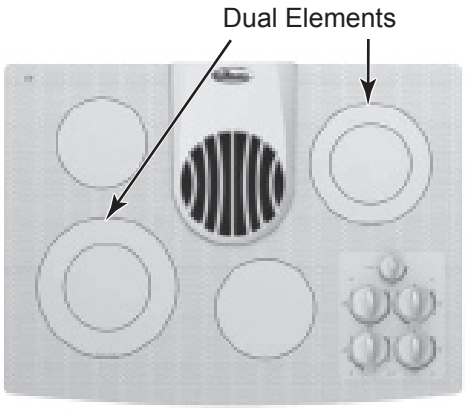
- Bridge Element
- Dual Double Element

Gas Cooktop

- Power Burner
- Simmer Burner
- Gas On Glass



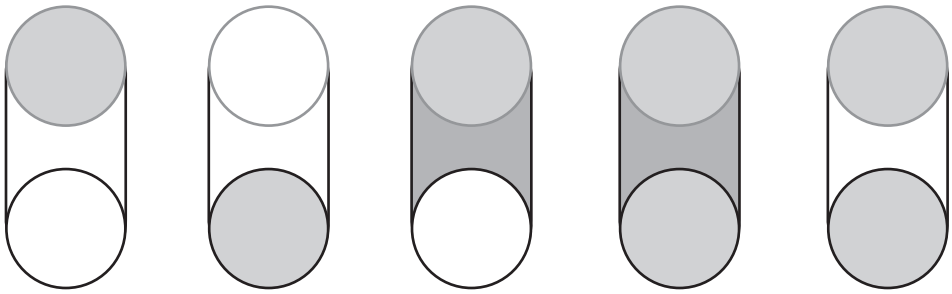
Bridge Element Cooktop



Dual Double Element Cooktop

BRIDGE ELEMENT

The electric cooktop uses a bridge element to accommodate larger, odd-shaped cooking utensils. The bridge configuration consists of 2 conventional 1800 Watt elements, and a 750 Watt bridge element. The 750 Watt bridge element is controlled by the upper left burner control knob. The bridge element can only be activated when the left rear burner is used. The illustration below shows five variations for the bridge configuration.



Rear Element On | Front Element On | Rear & Bridge Elements On | All Elements On | Rear Elements On

Bridge Configuration Options

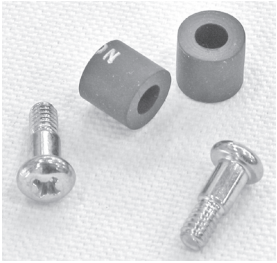
PRODUCT UPDATES

KitchenAid Electric Freestanding & Slide-In Ranges

MODELS: KERA807P*0 AND KESA907P*0 (* all colors)

CUSTOMER COMPLAINT: The cooktop knobs turn too easy.

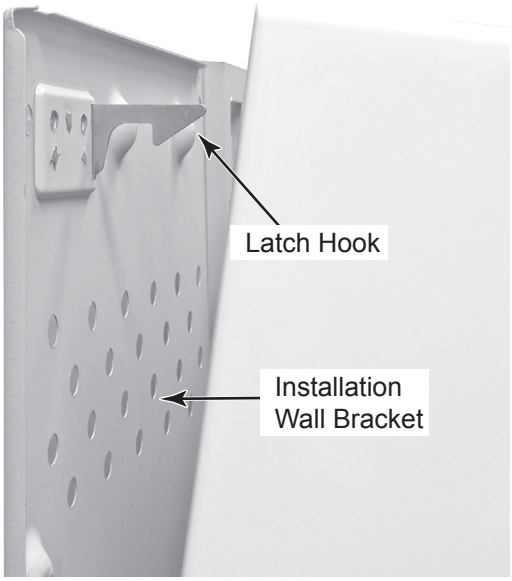
CORRECTION: Order and install Bushing Kit, Part **#8190985**. The kit will include eight bushings, and eight shoulder screws.

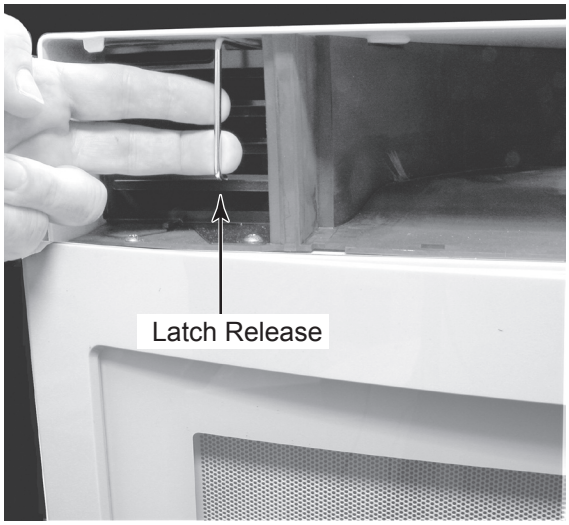


Microwave Hood Combinations (MHC)

Starting Code Date: TRS34

INFORMATION: Starting mid August, 2005, all Microwave Hood Combinations (MHCs) will be manufactured without the installation latch hook and latch release assembly. **NOTE:** Without this latch, the unit will fall/tilt forward as soon as the installation bolts are removed.



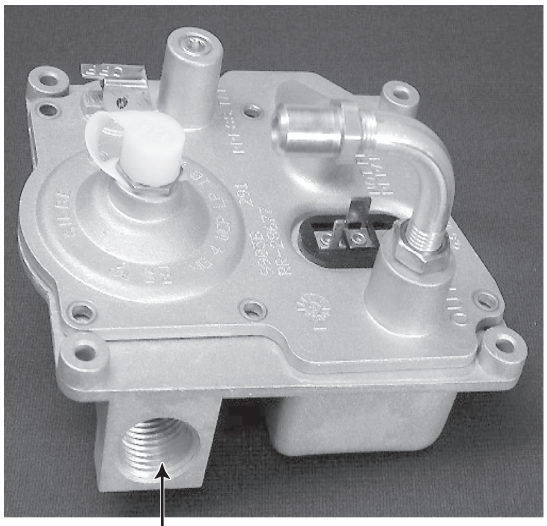


Gas Regulators Leaking

CUSTOMER COMPLAINT: Gas is leaking from the regulator.

CAUSE: The inlet threads are incorrectly manufactured.

CORRECTION: Order a new gas regulator, Part **#9761959**.



Gas Inlet Threads

DISHWASHERS

PRODUCT UPDATES

KitchenAid KUD_02 Dishwasher

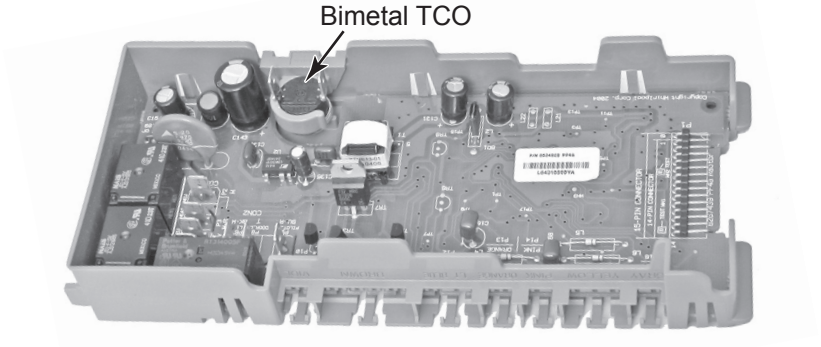
Identified by KUD_02 designation.

Warranty:

- 1 year parts and labor
- 5 year limited:
  - Heating element
  - Wash and drain motor
  - Racks
  - Electronic Control
- Lifetime on stainless steel tub and door

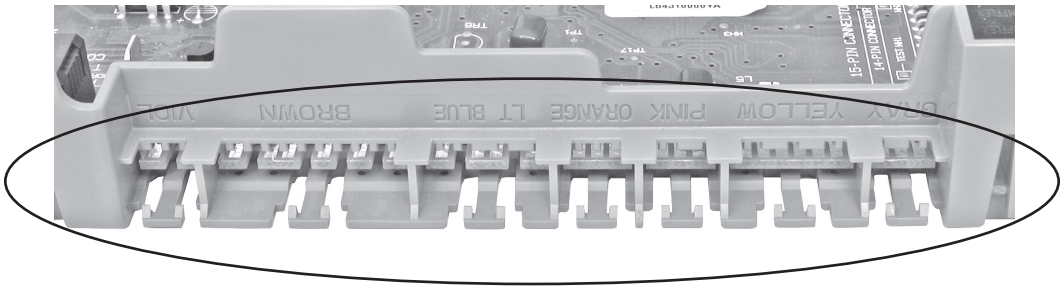
Electronic Control:

- The KUD_02 dishwasher line has an electronic control that features a bimetal TCO, RAST connectors, a ribbon cable connector that can accommodate both 14 and 15 pin ribbon cables, and relays that provide a dual line break for the wash motor and heating element circuits.
- The bimetal TCO is mounted in the same location as the previous in-line TCO. The TCO is non-resettable. If it fails, it must be replaced.



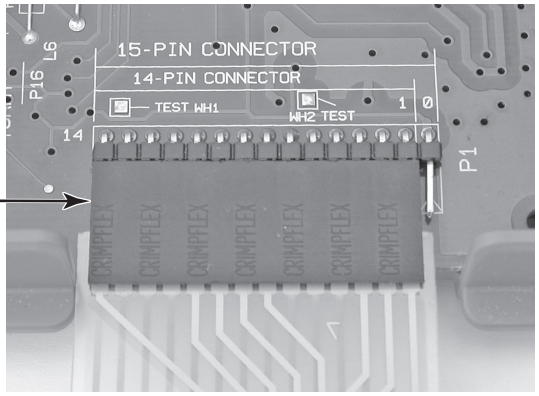
RAST Connectors:

- The RAST connectors on the side of the electronic control are being implemented to minimize potential miswiring and loose connections. A new wiring harness will be used to accommodate the RAST design. The components at the opposite end of the wiring harness will also have RAST connections (i.e. the inlet valve, drain pump motor, detergent dispenser, etc.).



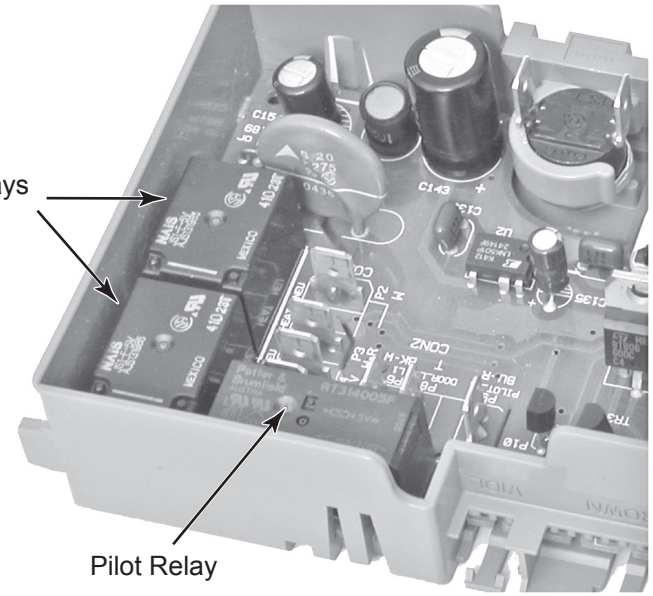
14 & 15 Pin Ribbon Connector:

- The ribbon cable connector is marked for use with either a 14 or 15 pin ribbon cable. The ribbon cable is tabbed to fit into slots in the electronic control to prevent incorrect installation.



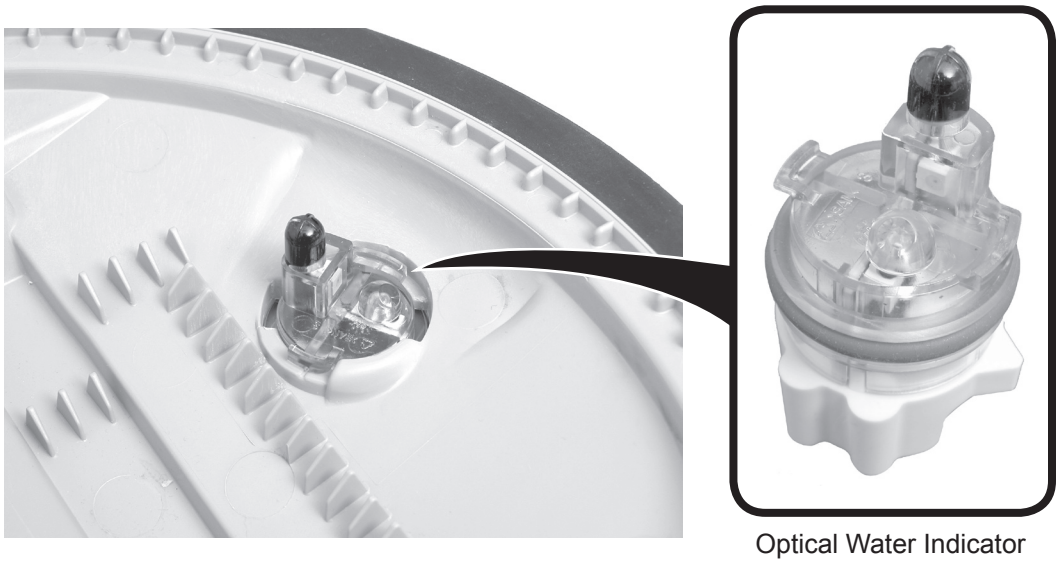
Dual Line Break Relays:

- The new control features pilot, motor, and heater relays. The pilot relay energizes all dishwasher loads on the L1 side of the circuit. The motor and heater relays are used to close the L2 side of the line for the wash motor and heating element. When the dishwasher is off, the wash motor and heating element will be isolated from both sides of the electrical circuit. During dishwasher operation, loads are energized and de-energized through the use of triacs, similar to the current design.



Optical Water Indicator:

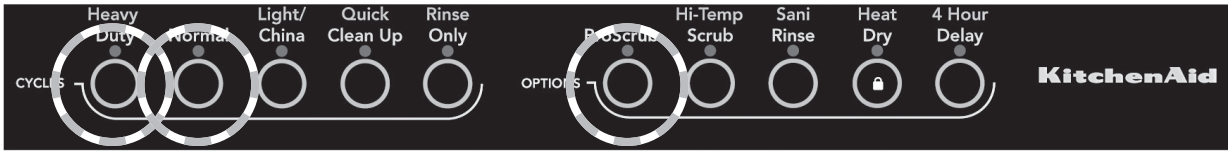
- The Optical Water Indicator (OWI) takes the place of the soil sensor and thermistor. The OWI checks water turbidity, and can modify the dishwashing cycle, depending on whether it detects high or low soil from the dish load. The OWI also functions as the thermistor, and can measure water temperature, in addition to turbidity.
- The OWI calibrates itself during its first full cycle to determine the type of water supply being used. The OWI will recalibrate every 250 cycles, (about once per year), or every time a diagnostics cycle is initiated. If the OWI is replaced, a diagnostics cycle must be initiated.
- The OWI is located in the sump in the same location as the current thermistor. The OWI is physically larger than the thermistor, and the hole in the sump is larger to accommodate the OWI. The OWI is removed in the same manner as the thermistor by removing the wiring harness, turning the body counter-clockwise, and pulling it down and out of the sump.
- In hard water areas, the OWI can become blinded with calcium deposits. If the OWI is blinded, it will default to the high soil cycle. It can be cleaned by wiping it with a damp cloth.



Optical Water Indicator

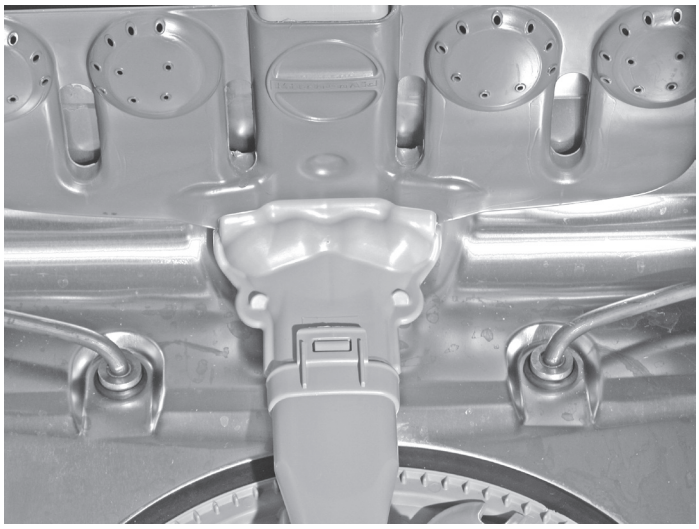
ProScrub Option (Some Models Only):

- ProScrub is an option that can be used to clean a heavily soiled casserole dish, baking dish, etc. The ProScrub option can be selected when using either the Heavy Duty or Normal cycles.

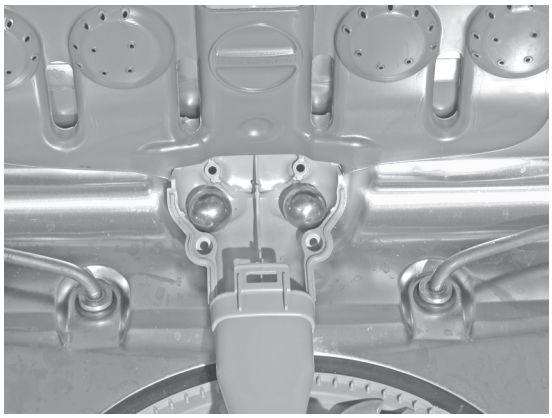


- To use ProScrub, the consumer positions the dish directly in front of the ProScrub manifold, located at the lower rear of the dishwasher. The dish is positioned at a 45° angle to receive the full benefit of the ProScrub water spray. When the ProScrub option is used, ProScrub will be activated once during the prewash cycle, and twice during the main wash cycle. Each activation will last approximately 2 minutes.

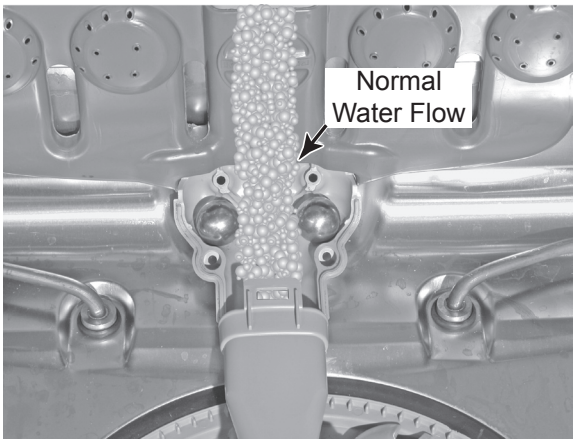
- The manifold feed tube elbow acts as a valve to direct water to either the upper spray arm, or to the ProScrub manifold.



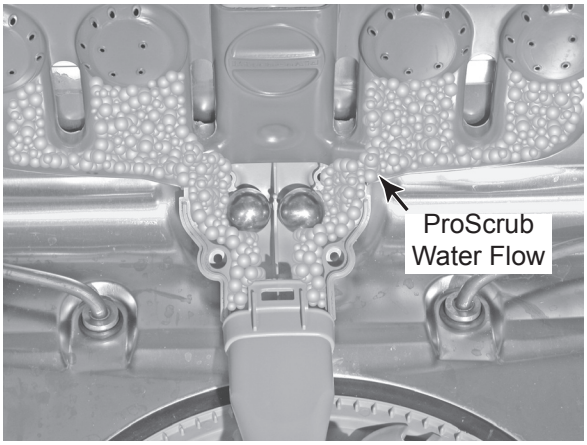
- Stainless steel balls in the elbow are controlled by a magnet, located under the dishwasher, and move within the elbow to direct water flow.

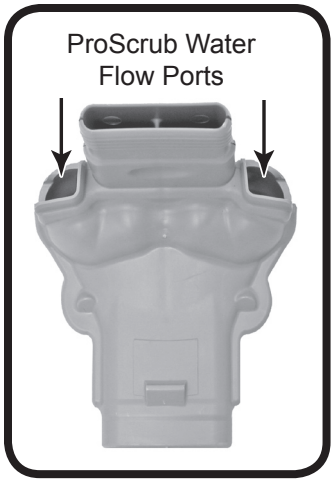


In the Normal position, water flows through the feed tube to the upper spray arm.



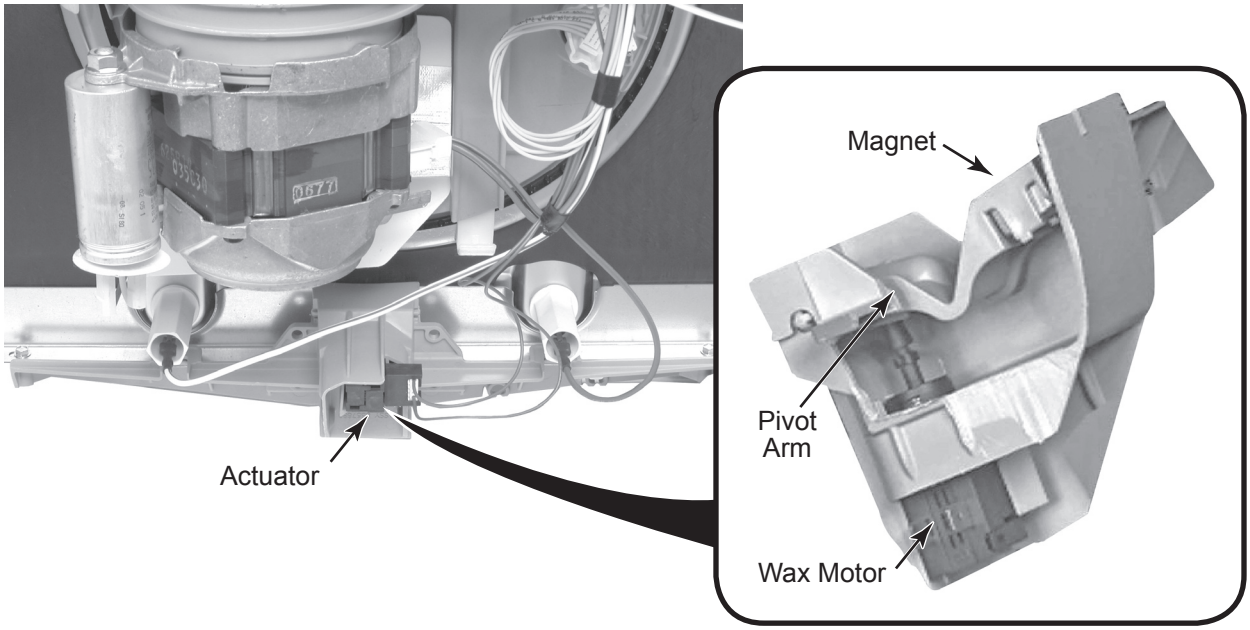
When ProScrub is activated, the steel balls are moved to the center position in the elbow, diverting water flow to the ProScrub manifold.





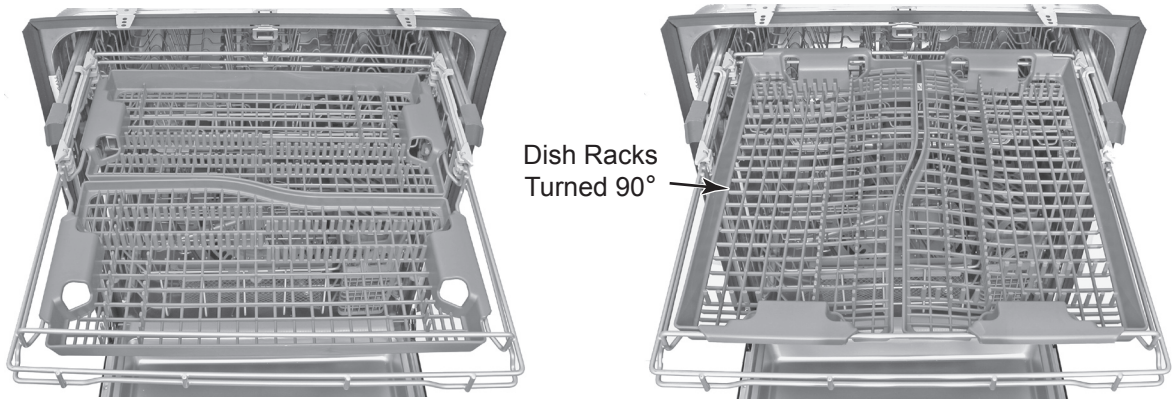
- The wash motor operation will be interrupted for approximately 2 seconds to allow water pressure to drop, and allow the balls to move to the new position.

- The actuator that directs the steel ball movement is located underneath, and at the rear of the dishwasher. It is attached to the tub flange, and is held in place with a screw at each end.
- The actuator consists of a wax motor that controls a pivot arm, which has a magnet molded into it at one end. When the wax motor is energized, the motor plunger extends, and pushes the pivot arm upward. The magnet in the pivot arm is brought into close proximity to the stainless steel balls, causing them to shift position. When the wax motor is de-energized, the plunger retracts the pivot arm and magnet, allowing the balls to return to the normal position.

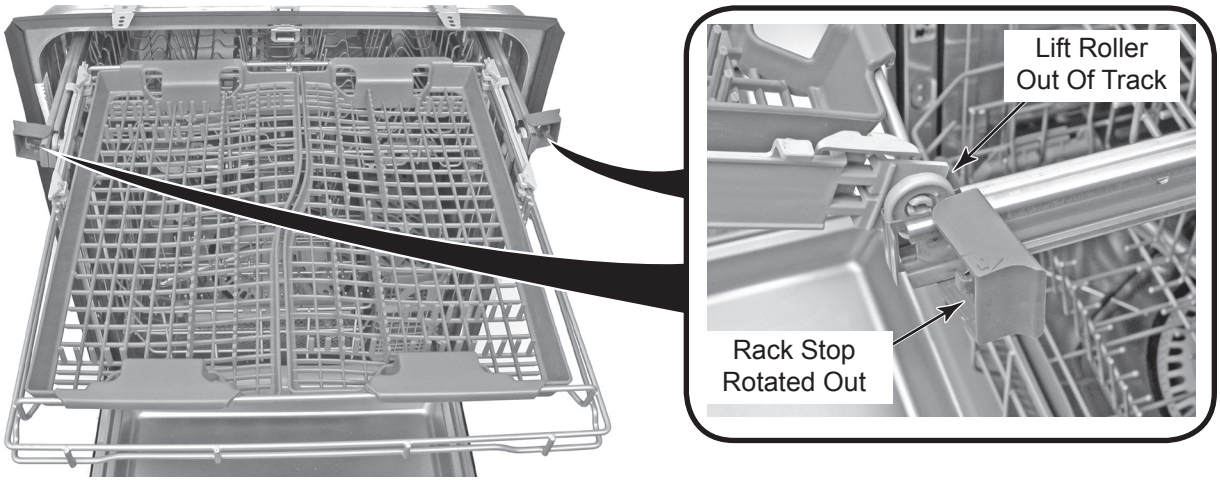


Third Level Rack (Some Models Only):

- The third level rack can be used for cutlery, and long items that can be laid flat. The rack contains two inserts that can be used together or individually, depending on what is placed in the middle rack.
- The inserts' position can be raised or lowered approximately 1 inch by turning them 90°, and relocating them on the rack support. When the inserts are in the low position, the middle rack must also be in the low position to prevent interference.



- The entire rack can be removed by rotating the track stops outward, and lifting the rack rollers out of the track.



Tall Tub Dishwashers

CLEAN LED BLINKS SEVEN TIMES

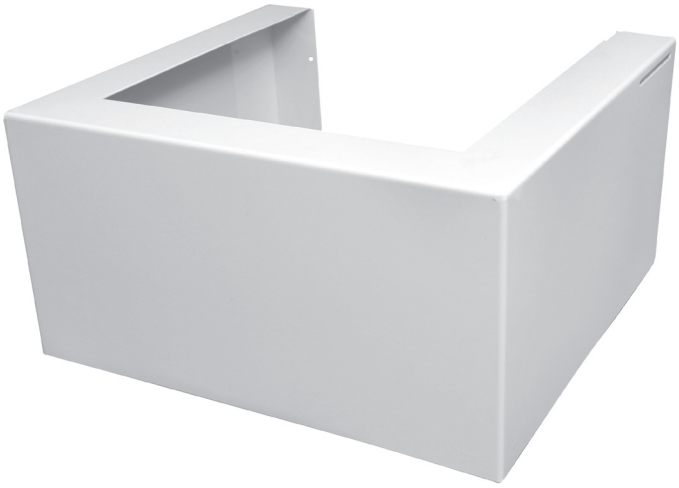
- Service Pointer **# K8178496**
- The electronic control looks for a temperature rise of 2 - 4°F.
- If there is no temperature rise, the control assumes that there is a heater circuit fault, and causes the clean LED to blink seven times.
- Replacing the control will not resolve the condition.
- Check the heater circuit, water fill, wash pump action, and on plastic tub models, the door switch for proper operation.
- Run a diagnostic cycle to reset the control.

LAUNDRY

PRODUCT INTRODUCTION

Pedestal

A 12˝ high pedestal, Model LAB0050PQ, will be available for the 24˝ washer and dryer, Models LHW0050 and LEW0050. The pedestal is to be used on these models only.

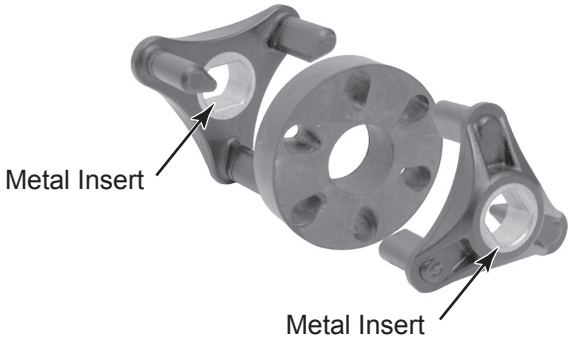


PRODUCT UPDATES

Direct Drive Washer

DIRECT DRIVE COUPLER

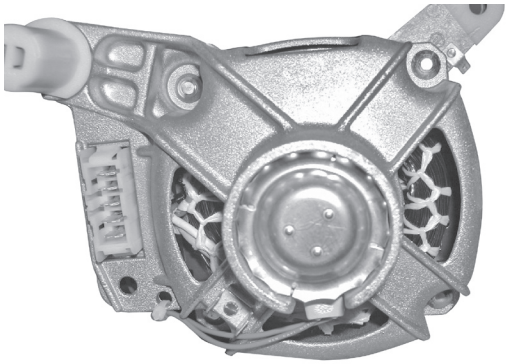
Metal inserts have been added to the coupler to reduce cracking.



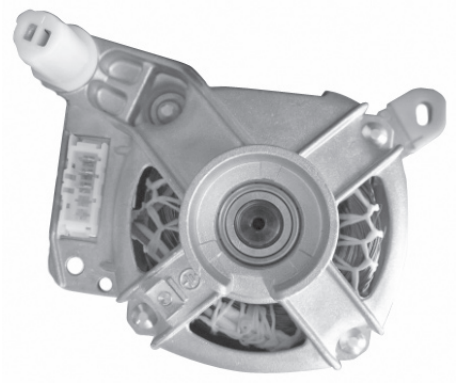
Duet Washer

TACHOMETER-LESS MOTOR

Some Duet washers will be built using a new Motor Control Unit (MCU) that does not require a motor tachometer to determine motor direction and speed. The new MCU can be used on motors with or without a tachometer. All service motors will have a tachometer that will function with either MCU, and all service MCUs will be the new style that will function with either motor.



Current Design With Tachometer



New Design Without Tachometer

ODORS IN DUET HE3 & HE4 WASHERS

CLEAN OUT PROCEDURE

NOTE: Make sure that you read these instructions completely before beginning the clean out process.

1. Open the washer door and remove any clothing or items from the washer.
2. Inspect the gray colored seal/bellow between the door opening and the basket for stained areas. Pull back the seal/bellow to inspect areas under the seal/bellow.
3. If stained areas are found, wipe down these areas of the bellows using the following procedure:
   a) Mix a dilute solution of liquid chlorine bleach and water (3/4-cup bleach in 1 gallon of warm tap water).
   b) Wipe the seal/bellow area with the dilute solution.
   c) Let stand 5 minutes.
   d) Wipe down area thoroughly with a dry cloth and let the washer interior air dry.
   e) Please note:
      - Do not use bleach at full strength for cleaning surfaces.
      - The use of rubber gloves is recommended when cleaning for prolonged periods.
4. To begin the clean out cycle, do the following:
   a) Open the washer door and remove any clothing or items from the washer.
   b) Be sure door is closed.
   c) Open the dispenser drawer and remove the detergent divider from the main wash detergent compartment. See the Use and Care Guide for instructions. No additives will be added at this time. You will be required to add them at a later step.
      - For Whirlpool Duet, select the “Power” button.
      - For Kenmore Elite HE products, move to the next step.
   d) Select the “Normal” wash cycle.
   e) Select the hottest wash water temperature available, (not all temperatures will be available).
   f) Select the highest spin speed available.
   g) Select the additional or 2nd Rinse option (if available).
   h) Press and hold the “Start” key for 2 seconds. The door will lock and filling will begin. **NOTE:** The water will dispense for a moment, then the door will unlock and re-lock and the cycle will continue.
   i) Once the filling has begun again, open the dispenser drawer and immediately add 1 cup liquid chlorine bleach to the main wash detergent compartment. The liquid chlorine bleach should immediately flow through the dispenser.

NOTE: Do not add any detergent to this clean out cycle. Use of more than 1 cup of bleach per month will cause product damage over time. Addition of bleach without immediately starting the cycle will cause product damage over time.

5. Once the clean out cycle has begun, allow the cycle to completely run.
6. After the clean out cycle is complete, leave the door slightly open/cracked to allow for better ventilation and prevention of future odor issues.
7. If you removed the detergent compartment divider, be sure to replace the divider to the correct position.

NOTE: If necessary, the clean out cycle may be interrupted by pressing the “Pause/Cancel” button. This will stop the cycle. A “Rinse and Spin” cycle must then be run to thoroughly rinse the remaining bleach from the unit. Failure to do so will cause damage to the unit and clothing added to the next cycle.

In addition to the clean out procedure, always do the following to prevent future odor issues.

1. Use only High Efficiency (HE) detergent.
2. Leave the door slightly open after each cycle to allow for better ventilation and drying of washer interior.
3. Repeat this clean out procedure only on a monthly basis, if necessary.
4. If the procedure does not sufficiently improve the machine odor, please evaluate the installation and usage conditions for other causes of the odor.

27˝ Gas Dryers

20,000 B.T.U. BURNER

A 20,000 B.T.U. burner will be introduced on all 27˝ gas dryers. The lower output of the new burner results in a reduction of high-limit trips, and overall improved drying performance.

The 20,000 B.T.U. burners will be used as replacements for the current 22,000 B.T.U. burners. The part numbers will sub automatically.

A new L.P. Conversion Kit, Part **#8576846**, will be required for the 20,000 B.T.U. burner.

COMMERCIAL LAUNDRY

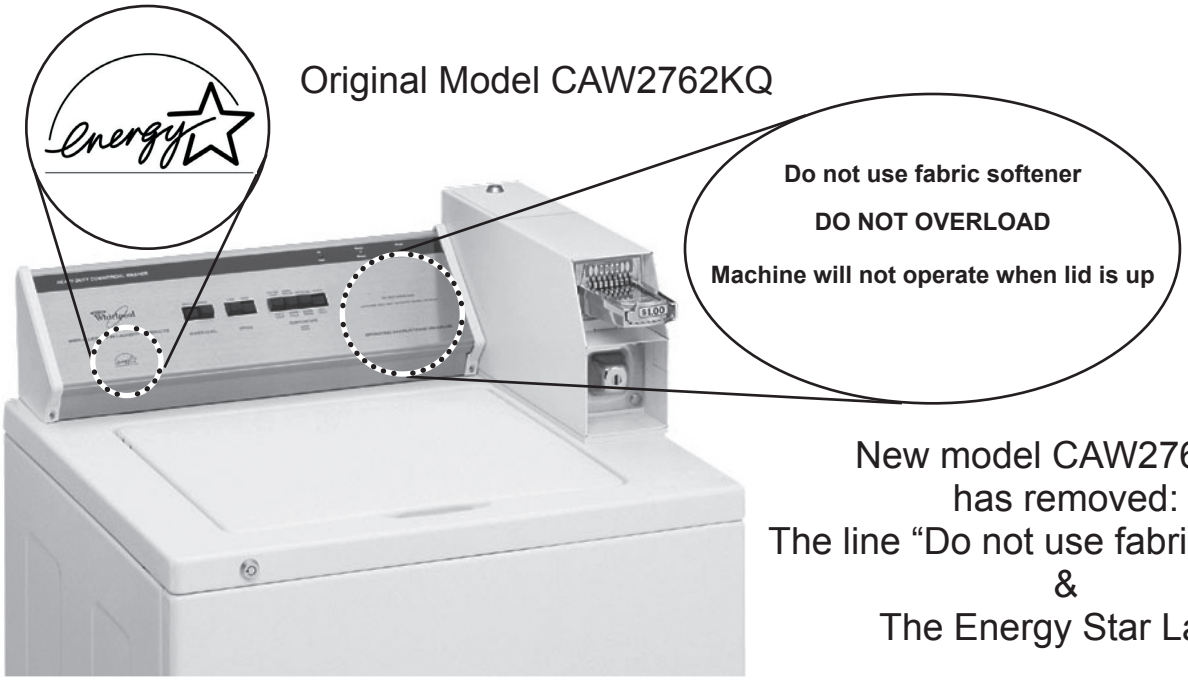
PRODUCT UPDATES

High Efficiency Top Load Commercial Washer

As of April, 2005, the Model CAW2762KQ Resource Saver washer has been changed to Model CAW2762RQ High Efficiency Top Load Commercial Washer.

Some of the new model features are as follows:

- Energy compliant in 50 states.
- Slightly larger basket (3.0 to 3.2 cu. ft.).
- The Resource Saver spray rinse washer is now a:
  High Efficiency (HE) deep rinse washer.
- Fabric softener can be used safely with the new & improved model.
- Automatic Temperature Controlled (ATC) 100°F hot & 70°F warm water.
- Has a 3-year all parts warranty and a 4-year transmission warranty.
- A coin-equipped version of this washer will soon be available.
  The new model number will be CAM2752RQ, and it will come with a 1-year labor warranty.



New model CAW2762RQ
has removed:
The line “Do not use fabric softener”
&
The Energy Star Label

Commercial Laundry Labor Warranty

Whirlpool has a factory warranty on Coin-Equipped Commercial Laundry. Independent Servicers, as well as A&E Factory Service, need to be reminded of this, and that training is available upon request.

WHIRLPOOL	ROPER
1-yr Labor 3-yr Parts	**90-day Labor 2-yr Parts**
CAM2752	RAK2751
CEM2750	REK2950
CGM2751	RGK2951
GCAM2792	
GCEM2990	
GCGM2991	

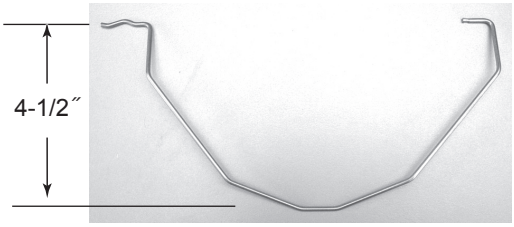
REFRIGERATION

PRODUCT UPDATES

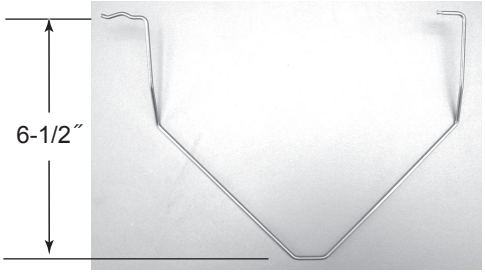
New KABI Bottom-Mount Ice Maker Shutoff Arm

PROBLEM: KitchenAid bottom-mount refrigerator ice bin gets too full. When the drawer is pulled out, ice falls behind the bin.

SOLUTION: The new arm has a different shape and reaches deeper into the bucket. Order shutoff arm, Part **#2314015**.



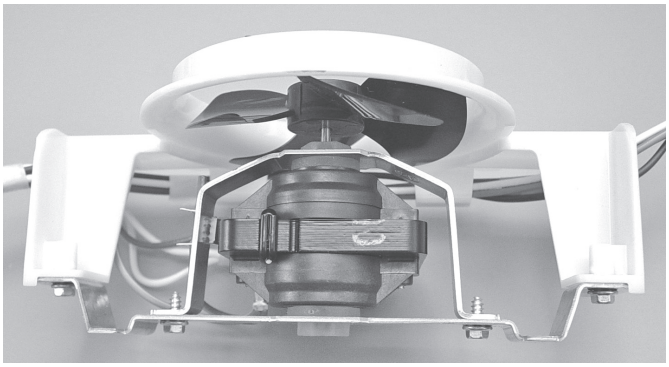
Old Design



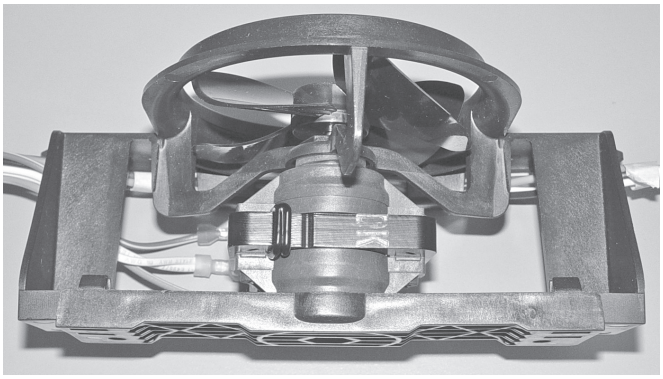
New Design

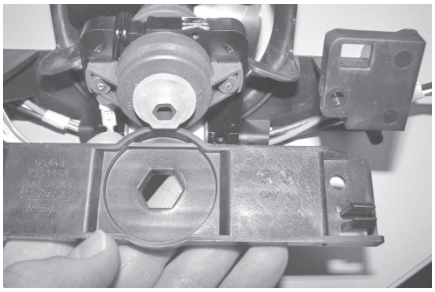
New Top-Mount Evaporator Fan Motor Bracket

There are no new service procedures with the new design.



Current Design

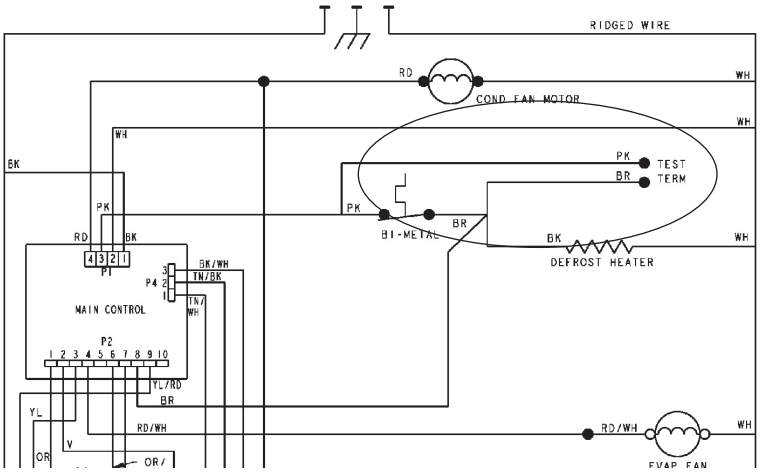




New Design

Refrigerator Wiring Harness Change

The pink and brown jumper connection for the bimetal that was found in the control area of most Whirlpool-built refrigerators will be eliminated. The main purpose of this connection was for testing after manufacturing. This test has been eliminated, therefore, the jumper is being removed.

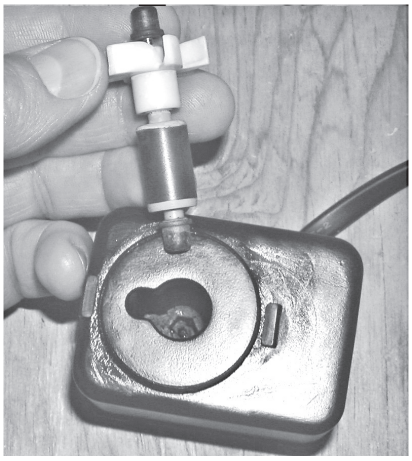


50# Ice Maker Redesign

Sales for the redesigned ice maker are expected to begin in early 2006. New features include:

- New recirculation pump
- Reservoir drain pump
- Active overlay, (touchpad) for user interface
- Smart valve (measured fill)
- Touch sensor

The recirculation and reservoir drain pumps are 12 volt dc sealed winding pumps.

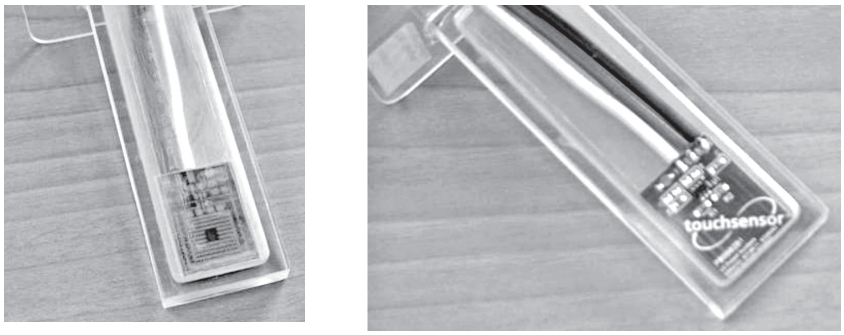


New-Style Pump

A touch sensor monitors water level in the reservoir.

When a low water level is sensed, a harvest is initiated. This should reduce problems with ice slabs being “hung up.”

The touch sensor electronics are encapsulated in plastic and do not touch the water. A field around the sensor is interrupted by any conductive material surrounding it (i.e. water, a finger, etc.).



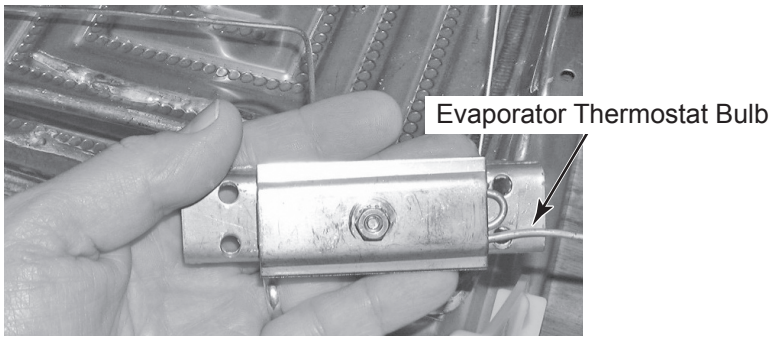
Ice Maker Touch Sensor

Old Style 50# Ice Maker

PROBLEM: Evaporator thermostat bracket is coming loose from the evaporator, and it was very expensive to repair. In the past, this problem often resulted in replacement of the evaporator, resulting in the product having to be scrapped.

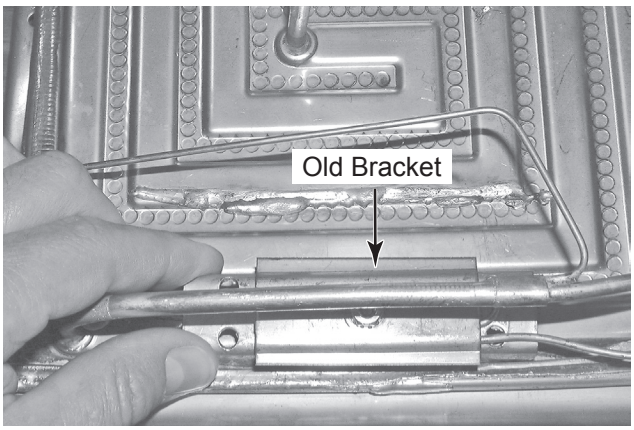
CAUSE: The original bracket was soft-soldered onto the bottom of the evaporator.

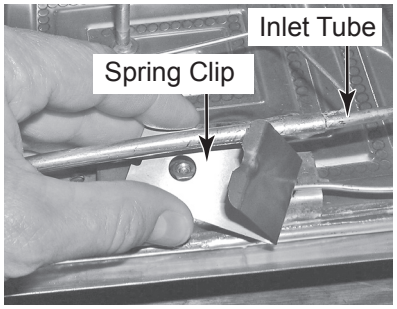
SOLUTION: Order and install a repair kit that includes a new bracket, nut, and stainless spring clip. The kit will be available in late 2005.

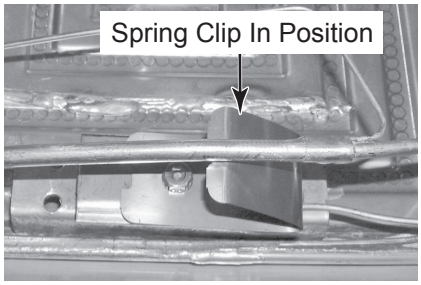


Here are the procedures for replacing the evaporator thermostat:

1. Transfer the thermostat bulb to the new bracket and tighten down. **NOTE:** You can't use the old one because the old solder will not allow the bracket to sit flat.
2. Move the new bracket into position as shown. **NOTE:** It will be in front of the old location, and pulled forward against the tubing that is attached to front lip of the evaporator.
3. Place the hole in the spring clip over the nut with the spring facing up.
4. Turn the clip counterclockwise until the "V" locks into position on the inlet tube. This will press the bracket up against the bottom of the evaporator.







Modified ice makers will have a different ice thickness. The ice will be thicker than before the bracket was removed. Each unit will be slightly different, and the customer will need to experiment to get the desired thickness. Start half way between thin and normal. This is a reasonable trade-off to an evaporator replacement, or scrapping the ice maker.

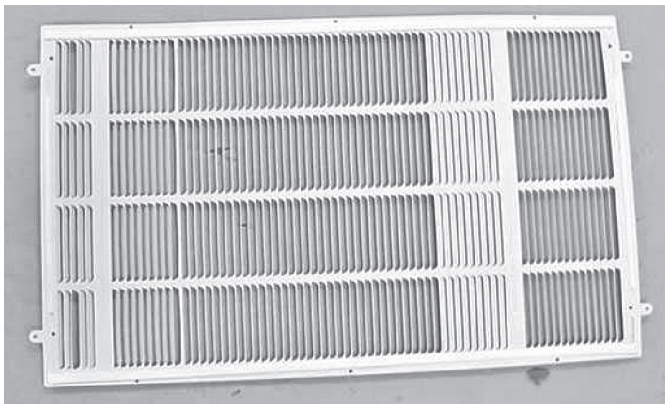
Model ACU108PP & ACU124PP Air Conditioners

CONDENSER FAN "HITS"

PROBLEM: Some ACU108PP & ACU124PP condenser blades are hitting the bottom pan.

CAUSE: Not enough clearance between the bottom pan and the condenser fan blade.

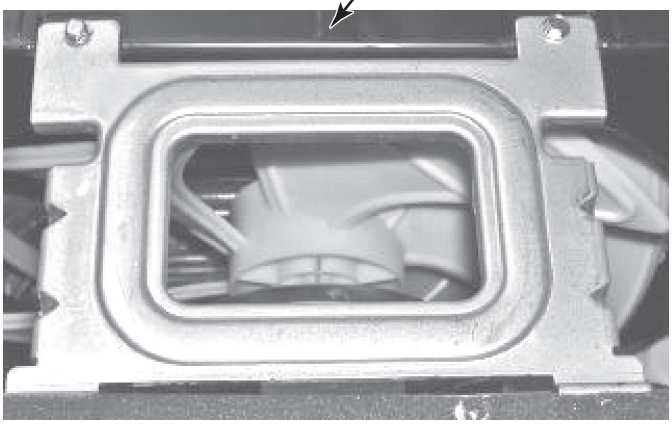
SOLUTION: Perform the procedure shown below. **NOTE:** These are slide-in units, and **must** be installed using the supplied rear grille. Not using the grille, or using an incorrect grille, will cause the unit to overheat, and warp the condenser blade.



Rear A/C Grille

1. Unplug the unit.
2. Remove the unit from its sleeve.
3. Remove the cabinet.
4. Remove the two screws from the motor mount (condenser side).
5. Pull the motor mount towards the front of the unit to free the bracket tabs.
6. Place the bracket tabs on top of the shroud.
7. Reinstall the screws in their original holes.
8. Reinstall the unit in its cabinet and sleeve.

Photo Shows Location Of Bracket After Repair



Lowe's Extended A/C Warranty

TERMS AND CONDITIONS

LIMITED WARRANTY: YEARS TWO THROUGH FIVE ON WHIRLPOOL® ROOM AIR CONDITIONER

This Limited Warranty is in addition to the original manufacturer's warranty that comes with your product and is found in the product Use and Care Guide. When combined with the original manufacturer's warranty, this Limited Warranty extends coverage to the original purchaser to five (5) years from date of purchase, and subject to the qualifications, limitations and exclusions found below.

This Limited Warranty is available to the original purchaser of a Qualifying Whirlpool® Room Air Conditioner* that is purchased in the United States from a Lowe's Home Improvement Center on or before December 31, 2004. To activate this Limited Warranty, the original purchaser must submit the completed Limited Warranty Registration form no later than 30 days from the date of purchase.

*Qualifying Whirlpool® Room Air Conditioners model numbers are: #ACQ058PP, ACQ062MP, ACQ068MP, ACQ088XP, ACQ10X0, ACQ128XP, ACQ158XP, AC1244XP, ACE082MP, ACE124XP. ACE184XP, ACS102PM, ACS102PP.

LENGTH OF WARRANTY
Limited warranty covering years two through five from date of purchase.

WHAT IS COVERED/WHAT WE WILL PAY FOR:
When this air conditioner is installed, operated and maintained according to instructions attached to or furnished with the products, Whirlpool Corporation will repair or replace the product at our discretion to correct defects in materials or workmanship in the mechanical or electrical controls. Service must be provided by an authorized service company.

WHAT IS NOT COVERED/WHAT WE WILL NOT PAY FOR:
A. Service calls to:
   1. Correct the installation of your air conditioner
   2. Instruct you how to use your air conditioner
   3. Replace house fuses or correct house wiring
   4. Clean or replace the air filter
A. Pickup and delivery. Your air conditioner is designed to be repaired in the home.
B. Damage to your air conditioner caused by accident, misuse, fire, flood, acts of God, or use of products not mentioned in the Use and Care Guide.
C. The removal and reinstallation of your air conditioner if it is installed in a overhead or other inaccessible location or is not installed in accordance with published installation instructions.
D. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
E. Replacement parts for units operated outside the United States.
F. Repairs when your air conditioner is used in other than normal, single-family household use.

MANUFACTURER SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.
Outside the United States a different warranty may apply. For details, please contact your authorized dealer.

If you need service, first see the "Troubleshooting" section of the Use and Care Guide. After checking "Troubleshooting", additional help can be found by Checking the "Requesting Assistance or Service" section, or by calling the Manufacturer's Consumer Assistance Center telephone number, 1-800-253-1301, from anywhere in the U.S.A.

Mr. Sample
Address
City, State, Zip

IMPORTANT INFORMATION

Your number for

FREE WARRANTY SERVICE, S22581

Dear Mr. Sample,

Congratulations on your recent Whirlpool Air Conditioner purchased at Lowe's. Because we value your business, Lowe's and Whirlpool are delighted to offer you a special 4-Year Extended Warranty - Free of charge.

Please save this important letter as reference should you need service on your appliance after the one-year manufacturer's warranty expires.

If you have questions or to schedule service please call the Lowe's Service Advantage toll-free number, 888-775-6937. Select option #2 for Service then option #1 to be connected with a Whirlpool representative. Your special project number is S22581. Please be sure to give this number to the authorized servicer so you will not be billed for the service call.

This 4-Year Extended Warranty becomes effective Mr. Sample upon expiration of the one-year manufacturer's warranty. Please see the back side of this form for complete terms and conditions of the extended warranty.

Again, thank you for your business!

Sincerely,

Jimena Ziegert
Whirlpool Brand Manager, Air Treatment

P.S. Mr. Sample, please save this letter with project number S22581 for Free Warranty Service.

New Dehumidifier Design

The new humidifier design:

- Reduces cost
- Improves quality
- Improves styling
- Adds features

Introduction will be in early 2006

SERVICE POINTER INDEX

KITCHEN

BRAND & ID#	*DESCRIPTION*	*DATE ISSUED*
Whirlpool & KitchenAid		
K8178490	**Microwave Overheating, Models: MH6140XF, MH7140XF, GH7145XF, YMH6140XF, YMH7140XF, YGH7145XF, MH8150XJ, GH8155XJ, KHMS147H, KHMS145J, YKHMS145J, KHMS147K, & KHMS145K— Code Dates XCH01 – XCL40:** Overheating Smell Coming From The Top Of The Microwave Cabinet	1/05
Whirlpool & Roper		
K8178492	**Oven Doors Warm During Oven Operation, Models: RF302BXKW/V/Q, FEP320KW/N, & FEP330KW/N/Q:** Oven Door Feels Hot To The Touch During Oven Operation	1/05
Whirlpool & KitchenAid		
K8178496	**Whirlpool & KitchenAid Tall Tub Dishwasher, Whirlpool Models: DU1050XTP, DU1100XTP, DU1101XTP, DU1145XTP, DU1148XTP, DUC600XTP, DUL240XTP, GU2400XTP, GU2500XTP, GU2548XTP, GU2600XTP, GU3200XTP Kitchenaid Models: KUDx01-6 Where x Could Be Any Letter— Serial Code Date-All:** Clean LED Blinks 7 Times	1/05
Whirlpool & KitchenAid		
K8178491	**Convection Fan Scraping On The Oven Wall, Whirlpool Models: GR478LXPB0, GR478LXPQ0, GR478LXPS0, & GR478LXPT0 KitchenAid Models: KERA205BL0, KERA205PBT0, KERA205PSS0, & KERA205PWH0—Manufactured Before Code Date: RR44:** Convection Fan Scrapes On The Rear Oven Wall	2/05
KitchenAid		
K8178479A	**Kitchenaid Tall Tub Dishwasher: Models: KUDx01 Where x Could Be Any Letter— Serial Code Date: FK30 Through FR36:** Heating Element Not Operating	3/05
Whirlpool & KitchenAid		
K8178515	**Whirlpool And Kitchenaid Tall Tub Dishwasher Model-All, Serial Range-All:** Drain Pump Leaking After Removal	5/05

BRAND & ID#	*DESCRIPTION*	*DATE ISSUED*
KitchenAid K4317380	**KitchenAid Gas Freestanding & Slide-In Ranges, Models: KGRA806P, KGRI801P, KGRK806P, KGSA906P, & KGSI901P—Code Date: Units Built Before XR24:** Cooktop Burner: Simmer Goes Out, etc.	6/05
KitchenAid K4317381	**KitchenAid Freestanding & Slide-In Gas Ranges, Models: KGRA806P, KGRI801P, KGRK806P, KGSA906P, & KGSI901P—Code Date: Units Built Before Code Date XS10:** Surface Ignitors Continue To Spark Beyond The “Lite” Position	6/05
KitchenAid K4317382	**Control Display Window Flexing, Freestanding Models: KERI201P, KERI203P, KERI204P, KERA205P, KERA807P, KERV808P, KGRA806P, KGRI801P, KGRK806P, YKERA807P, YKERV808, YKERI201P, YKERI203P, YKERI204P, & YKERA205P Code Date Tulsa-Built Freestanding Ranges: Prior To Code Date RR51 Code Date Oxford-Built Freestanding Ranges: Prior To Code Date XS04 Slide-In Models: KESA907P, KESI901P, KESV908P, KGSA906P, KGSI901P, YKESA907, YKESV908P Code Date Slide-In Models: Prior To Code Date XS04:** Oven Control Window Flexes When Pushed	6/05
KitchenAid K4317383	**KitchenAid Electric Freestanding & Slide-In Ranges, Models: KERA807P, KERV808P, YKERA807P, YKERV808, YKERA205P, KESA907P, KESI901P, KESV908P, YKESA907, & YKESV908P—Code Dates: Units Built Before Code Date XS12:** Oven Not Holding Temperature, etc.	6/05
Whirlpool & KitchenAid K8178519	**Gas Freestanding & Slide-In Ranges, Models: KGRA806P, KGRI801P, KGRK806P, KGSA906P, & KGSI901P Whirlpool Slide-In Model: GW395LEP—Code Dates: All Products Built Before XS10:** Gas Oven Won’t Reignite During Cooking Cycles	6/05
Whirlpool & Roper K8178523	**Oven Doors Warm During Oven Operation, Models: All Gas Standard Clean Ovens—Code Date: Prior to Code Date VES04:** Oven Door Feels Hot To The Touch During Oven Operation	6/05
Whirlpool & KitchenAid K8178524	**KitchenAid & Whirlpool Gas & Electric Freestanding And Slide-In Ranges With New Global Oven Control, Models: KERI201P, KERI203P, KERI204P, KERA205P, KDRV807P, KERA807P, KERV808P, KGRA806P, KGRI801P, KGRK806P, YKERA807P, YKERV808, YKERI201P, YKERI203P, YKERI204P, YKERA205P, KDSV907P, KESA907P, KESI901P, KESV908P, KGSA906P KGSI901P, YKESA907, YKESV908P, GR448LXP, GR478LXP, GS470LEM, & GS475LEM—All Code Dates:** Oven Temperatures Not Getting Up To Set Temperature According To Sensor Readout In The Diagnostics Program	6/05

BRAND & ID#	*DESCRIPTION*	*DATE ISSUED*
KitchenAid		
K8178525	**KitchenAid Gas & Electric Freestanding Ranges, Models: KERA807P, KERV808P, KGRA806P, KGRI801P, KGRK806P, YKERA807P, YKERV808, KESA907P, KESI901P, KESV908P, KGSI901P, YKESA907, & YKESV908P—Code Dates: Units Built Before Code Date XR49:** Cycles Being Cancelled Or Cutting Off By Themselves, etc.	6/05
Whirlpool & KitchenAid		
K8178527	**Whirlpool & KitchenAid Freestanding Electric Range, Whirlpool Models: GR448LXP & GR478LXP KitchenAid Models: KERI201P, KERI203P, & KERA205P—Code Dates: All Ranges Built Before Code Date RS11:** Moisture Build Up Behind The Glass Console	6/05
Whirlpool & Inglis		
K8178502A	**Whirlpool & Inglis Plastic Tall Tub Dishwasher Heater Rework #R17365:** Certain Whirlpool And Inglis Brand Plastic Tall Tub Dishwashers Were Manufactured With A Heating Element That May Cause A Quality Issue With The Dishwasher	6/05
Whirlpool		
K8178505A	**Whirlpool Tall Tub Dishwasher—Serial Code Date: FR22 - FR24:** Wash Motor Rework #R14165	6/05

REFRIGERATION

BRAND & ID#	*DESCRIPTION*	*DATE ISSUED*
Whirlpool & KitchenAid		
R8178508	**Top Freezer Refrigerators Excessive Frost/Ice Accumulation In Freezer Section, Models: 18 To 22 Cu. Ft. Top Freezer Refrigerators With Serial Numbers Beginning With EE, EF, EG, EH, EJ, EK, EL, EM, EP, & ER:** Frost In The Back Of The Freezer Section	4/05
KitchenAid		
R4317378	**Apparent Water Marks Primarily On Black Paint Finish, Primary Models: KTRC19MMBL01, KTRC22KMBL02, & KTRC22MMBL02—Serial Codes ER41 To ER49:** Uneven Finish Or Marks In The Door Paint	5/05
Whirlpool		
R8178510	**Whirlpool Portable Air Conditioner, Model ACP102PR:** When Power Is Interrupted During Use, The Air Conditioner Will Not Automatically Return To Operation	5/05
Whirlpool & KitchenAid		
R8178512	**Whirlpool and KitchenAid Top Freezer Refrigerators With Internal Water Dispenser:** Dispenser Drips After Use	5/05
Whirlpool, KitchenAid, & Roper		
R8178520	**Plastic Liner Repair Kit, All Refrigerators With Cracked Or Damaged Plastic Liners:** Cracked Or Damaged Liner	5/05
Whirlpool & OEM Brands		
R8178419A	**Whirlpool and Crosley Heat & Cool Air Conditioners, Thermal Fuse Kit Available, Models; ACE244XL0, ACE244XL1, ACE244XP0, CAH24WCL0, CAH24WCL1, CAH24WCP0, ACE184XL0, ACE184XP0, CAH18WCL0, & CAH18WCP0:** Thermal Fuse For Heater Assemblies Is Now Available As A Separate Component From The Heater	6/05
Whirlpool		
R8178521	**Whirlpool Top Freezer Refrigerators With External Water Dispenser, Models: GT1NHWXP, GT1PHWXP, GT1SHWXP, & GR2SHWXP:** The Dispenser Drips After Use. Water May Run Down The Refrigerator Door	6/05

— NOTES —

TRAINING EVALUATION

Please use this page as a reminder to provide us with feedback on today's meeting.

Complete the online evaluation form, located on the ServiceMatters website @:

www.ServiceMatters.com

Instructor's Name: _____

Today's Training Date: _____

PRODUCT SPECIFICATIONS
AND
WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

FOR WHIRLPOOL PRODUCTS: 1-800-253-1301
FOR KITCHENAID PRODUCTS: 1-800-422-1230
FOR ROPER PRODUCTS: 1-800-447-6737

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-253-2870

HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN AUTHORIZED SERVICER

FOR LITERATURE ORDERS:

PHONE: 1-800-851-4605

FOR TECHNICAL INFORMATION AND SERVICE POINTERS:

www.servicematters.com

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

1-800-461-5681

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

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Whirlpool CORPORATION
Benton Harbor, Michigan

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